2008 Report to Congress

Pacific Coastal Salmon Recovery Fund

FY 2000–2007

Overview

The Pacific Coastal Salmon Recovery Fund (PCSRF) was created by Congress in fiscal year (FY) 2000 to address the listings of Pacific salmon and steelhead populations under the Endangered Species Act (ESA), as well as the impacts of the Pacific Salmon Treaty Agreement between the United States and Canada. Under the PCSRF, states and tribes of the Pacific Coast region (Washington, Oregon, California, Idaho and Alaska) have implemented projects and activities aimed at restoring and protecting salmon and steelhead and the habitat critical to the many stages of their life cycles (see inside front cover for salmon life cycle). Mechanisms are in place to ensure that projects are conducted to achieve success and that they include measures of performance to track accountability in the use of public funds. Since the FY 2002 funding cycle, NMFS has required the PCSRF grantees to report information and metrics on project activities using a consistent set of performance indicators.[1] This Report provides a summary of accomplishments from program inception through September 2007 as measured with these indicators. Examples of specific projects are described in sidebars throughout the document. This Report also summarizes the PCSRF funding expended to date.

[1] These indicators are maintained in an online database at: http://webapps.nwfsc.noaa.gov/pcsrf/. This database is the source of information used to track progress reported in this document.

The Importance of Pacific Salmon and Steelhead

Pacific salmon and steelhead represent a significant biological, cultural, and economic asset to the United States and the Pacific Northwest. There are both direct and indirect economic benefits tied to salmon and steelhead. Studies and analyses have shown benefits ranging from hundreds of millions to billions of dollars annually derived from salmon and steelhead fisheries.[2,3]

In addition, salmon are an integral part of tribal culture, with runs tied to the cultural identity of many tribes along the coast and throughout the Columbia and Klamath River basins. Tribes frequently depend on the species for sustenance, as well as recognizing salmon within cultural ceremonies. Historically salmon were the basis of a well established trade economy, and today tribal communities still depend upon the economic value of commercial and sports fishing industries as a livelihood.

Salmon are also a keystone species within ecosystems of the Pacific Coast, supporting animal and plant communities from the open ocean to areas thousands of miles inland. Healthy populations of salmon support robust populations of top-level predators, such as bears, eagles, and killer whales. Salmon and steelhead carcasses add nutrients to upland riparian ecosystems, supporting invertebrates and plants, critical components of salmon habitat.

Changes in coastal ecosystems, from both human and natural factors, have contributed to the decline of Pacific salmon and steelhead over the past century. Human activities have altered important spawning and juvenile rearing habitat, contributed to changes in water quality and quantity, and reduced overall population numbers through past harvest and hatchery practices. Human activities have stressed fish populations and contributed to their vulnerability to environmental changes and events. The effects of stressed populations may become more evident as global climate changes continue to affect stream, river, and ocean conditions along the Pacific Coast.

For tracking and assessment purposes, individual populations of salmon and steelhead are grouped into Evolutionarily Significant Units (ESUs) for salmon and Distinct Population Segments (DPSs) for steelhead. Each ESU and DPS represents a distinct genetic stock. There are 37 salmon ESUs and 15 steelhead DPSs (52 total) within the Pacific Coast region (not including Alaska), with 28 currently listed as threatened or endangered.[4] The ESUs and DPSs are organized into eight recovery domains (see back of title page). Activities under the PCSRF help address overall sustainability of ESA-listed species in these recovery domains and other non ESA-listed Pacific salmon and steelhead species. PCSRF activities also support the Pacific Salmon Treaty Agreement and other tribal treaties.

Measuring PCSRF Performance

A primary objective for the PCSRF is to contribute to the ongoing recovery and conservation of at-risk salmon and steelhead populations, and habitat restoration efforts, throughout the region. The program actively funds and supports projects designed to protect and restore habitat critical to salmon and steelhead productivity and viability, remove barriers to salmon migration, and ensure healthy populations are maintained. The thousands of PCSRF projects throughout the region contribute to preventing extinction and improving the status of ESA-listed species, as well as to protecting non ESA-listed populations.

Based on work begun in 2004 and continued in subsequent years, NMFS and the states and tribes have developed the *Pacific Coastal Salmon Recovery Fund Performance Goals, Measures, and Reporting Framework* to assess progress in achieving the purposes of the PCSRF.[5] Six goals—three short, two mid, and one long term—have been identified as shown in Exhibit 1. Activities toward the goals are on-going and, in many cases, cumulative. Data are being gathered to report on the mid and long term goals in more detail in the future. The next sections of this Report primarily describe progress on the short-term goals.

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[2] Independent Economic Analysis Board, *Economic Effects from Columbia River Basin Anadromous Salmonid Fish Production*, Document # IEAB 2005-1, revised December 2005.

[3] U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. *Final Economic Analysis of Critical Habitat Designation for Seven West Coast Salmon and Steelhead ESUs*, sections 5.4.1 - 5.4.8.4. August 10, 2005. (Available at: http://swr.nmfs.noaa.gov/chd/Final_salmon_economics_August_10_2005.pdf).

[4] Puget Sound Steelhead were listed in 2007.

[5] http://www.nwr.noaa.gov/Salmon-Recovery-Planning/PCSRF/upload/PCSRF-Perf-Framework.pdf.

Exhibit 1: PCSRF Goals

Short Term (Less Than 5 Years)
Enhanced availability and quality of habitat
Improved management practices
Major habitat limiting factors addressed
Mid Term (5–15 Years)
Improved status of ESA-listed salmon (naturally spawning populations increased)
Maintained healthy salmon populations
Long Term (More Than 15 Years)
Overall sustainability of Pacific salmon

The *Reporting Framework* provides an evolving mechanism for tracking regional progress toward the PCSRF program goals. Indicators of performance have been developed for each goal in the *Reporting Framework*, focusing on the specific investments made within the PCSRF for salmon and steelhead restoration and conservation. States and tribal entities are responsible for working with partners conducting PCSRF-funded work to collect data and assess progress toward the goals outlined above.

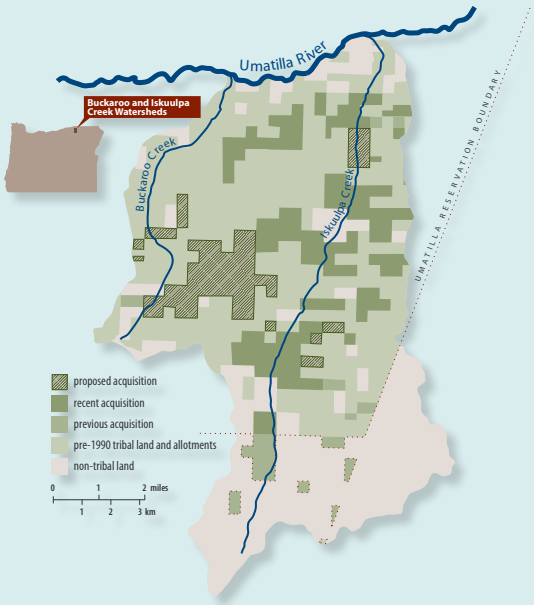
NMFS and its partners recognize that many variables affect salmon and steelhead recovery, including biological constraints inherent in their life cycles, and factors such as climatic and ocean conditions. These factors make measurement of progress challenging, as the baseline constantly changes, but they are increasingly important to measure in their own right (e.g., patterns of ocean temperatures relative to fish returns) to better understand the most effective strategies for PCSRF investments.[6]

[6] For information on physical and biological ocean conditions and their possible effects on salmon populations along the West Coast see U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Ocean Conditions and Salmon Survival in the Northern California Current*, November 2006, available online at: http://www.nwfsc.noaa.gov/research/divisions/fed/ecosysrep.pdf (last viewed on 1/7/2008).

Columbia River Inter-Tribal Fish Commission (CRITFC)—Confederated Tribes of the Umatilla Indian Reservation Land Acquisition

The Confederated Tribes of the Umatilla Indian Reservation, a member of the Columbia River Inter-Tribal Fish Commission (CRITFC), has worked to restore land on the Umatilla reservation to tribal ownership, in conjunction with fostering consistent land management practices and helping recover salmon and steelhead populations. Over the past ten years, funding to acquire and protect habitat in the upper reaches of the Umatilla River watershed has been provided by PCSRF, the Bonneville Power Administration, and the U.S. Fish and Wildlife Service. Tribal and PCSRF funds specifically have enabled the tribe to purchase 2,761 acres within the Umatilla River Basin. Another 1,525 acres are currently being proposed for acquisition.

The Tribes are working to more effectively manage the entire watershed, focusing on strongholds for critical spawning and rearing habitat, such as Iskuupla Creek. Iskuulpa Creek provides critical spawning habitat for threatened summer steelhead and rearing habitat for re-introduced coho and Chinook salmon. An average of 60 redds are counted annually in a 6.7-mile index reach of the stream—the highest of 13 streams surveyed for summer steelhead spawning in the Umatilla Basin. The entire subbasin supports approximately 38,000 fish, 97% of which are threatened summer steelhead. Land acquisition provides a means to promote better land management practices such as improved grazing and logging techniques, and to reconstruct stream reaches damaged by past channelization practices. The Umatilla Tribes are using PCSRF funds to acquire land to help put fish back in the rivers.



Umatilla Tribes Land Acquisition

PCSRF Progress

For the past seven years, based on a variety of conservation planning and limiting factor assessments, states and tribes have identified and invested in priority activities for salmon and steelhead recovery. Thousands of projects (see the map on the inside back cover), ranging from single sites of culvert replacement to hundreds of acres of habitat protection or restoration have been funded. As projects are completed, state and tribal grantees collect data to provide indicators of progress toward the program goals. Exhibit 2 describes and quantifies the progress in the performance indicators through September 2007. The text following describes progress toward the short, mid, and long term goals outlined above.

Exhibit 2: Region-wide Performance Reporting Results, FY 2000–September 2007*

Output	Regional Indicator	Completed	Proposed	Total
Instream Habitat Projects	Stream Miles Treated	**695 Miles**	483	1,178**
Wetland Habitat Projects	Acres Created	**2,025 Acres**	6,263	8,288
	Acres Treated	**26,457 Acres**	2,647	31,224
Estuarine Habitat Projects	Acres Created	**352 Acres**	1,365	1,717
	Acres Treated	**566 Acres**	2,190	2,756
Land Acquisition Projects	Acres Acquired/Protected	**118,175 Acres**	13,894	132,069
	Stream Bank Miles Acquired or Protected	**2,252 Miles**	110	2,362
Riparian Habitat Projects	Stream Miles Treated	**4,366 Miles**	887	5,253
	Acres Treated	**25,094 Acres**	6,629	31,723
Upland Habitat Projects	Acres Treated	**322,792 Acres**	168,769	491,560
Fish Passage Projects	Number of Barriers Removed	**1,929 Barriers Removed**	773	2,702
	Stream Miles Opened	**3,575 Miles**	2,825	6,400
	Number of Fish Screens Installed	**859 Fish Screens**	194	1,053
Hatchery Fish Enhancement Projects	Number of Fish Marked for Management Strategies	**280,498,636 Fish**	177,933,260	458,431,896
Watershed Planning and Assessment Projects	Number of ESUs with Identified Factors Limiting Recovery	**27 out of 28 ESUs**	•	•
Research, Monitoring, and Evaluation Projects	Miles of Stream Monitored	**53,528 Miles**	27,123	80,651
	Number of Assessments Completed	**401 Assessments**	213	614

* In previous reports habitat metrics have been reported as a total of proposed and completed projects for each fiscal year. In 2007 PCSRF changed their reporting method to include only completed projects for each fiscal year; this table reports both the new calculation and the totals to match previous reports.
** Total stream miles treated decreased from the amount reported in the 2007 Report in part due to a reallocation of project miles by the CDFG.

Short Term Goal: Enhanced Availability and Quantity of Habitat

Restoration projects play a unique role in salmon and steelhead migration, reproduction, and juvenile rearing within watersheds. Instream, riparian, and upland habitat projects provide erosion control, enhance instream flow and streambed conditions, and improve water quality and quantity in watersheds inhabited by salmon. Estuarine and wetland restoration projects protect and improve habitat that is important for migration, rearing, and transition into the ocean environment. Nearly 500,000 acres of habitat have been restored, protected, and made more accessible to salmon and steelhead based on PCSRF-funded projects since FY 2000.

Stream and river barriers have been very detrimental to salmon and steelhead over the past century. Barriers to fish passage include poorly designed culverts, road easements, and older hatchery diverters. In many cases these barriers prevent fish from reaching healthy spawning habitat, interrupt their migration, and inhibit completion of their life cycles. Removing these barriers has been one of the focus areas for improving salmon and steelhead status and condition in the Pacific Coast region. Many PCSRF projects focus on increasing fish access to previously unavailable habitat and improving overall watershed productivity for salmon. Approximately 3,575 miles of stream have been opened based on PCSRF projects since FY 2000.

Short Term Goal: Improved Management Practices

Several PCSRF grantees have funded and supported hatchery improvement projects to bolster declining salmon and steelhead populations. Through fish marking programs, grantees are working to estimate fish abundance numbers and allow for selective fisheries for hatchery fish where appropriate. Since FY 2000, more than 280 million hatchery fish have been marked to improve harvest and hatchery management practices throughout the region. All harvests are now managed to conserve wild populations. Significant investments have been made to improve practices and the viability of hatchery fish in recolonization efforts for salmon and steelhead populations along the Pacific Coast.

Short Term Goal: Habitat Limiting Factors Addressed for ESA-listed Salmon

Watershed assessments and recovery planning efforts have identified key factors that limit salmon and steelhead recovery (limiting factors) for 27 of the 28 ESA-listed ESUs and DPSs. These factors can be used to help prioritize recovery actions within each ESU/DPS. The limiting factors for each ESU/DPS are defined in the *Reporting Framework*. The habitat factors most frequently addressed by PCSRF tend to be linked (e.g., water quality and temperature), and efforts to improve habitat are often cumulative, meaning that as each project addresses a limiting factor, the overall habitat value for salmon and steelhead increases.

Idaho—Pahsimeroi River Reconnect

The Pahsimeroi River, a tributary of the Salmon River, has been identified as a priority habitat area for Snake River Spring/Summer Chinook salmon and summer steelhead. Idaho has worked cooperatively with landowners for the last 12 years to improve fish passage and spawning habitat throughout the river's lower reaches.

In 2007, PCSRF funds played a critical role in closing an irrigation diversion that had removed a majority of the water from the river and prevented fish passage upstream. Through water conservation measures and point of diversion transfers, 15-20 cubic feet per second of water have been conserved for in-stream flow enhancement. This will provide enhanced flows in over 3.5 miles of the river channel and will reconnect other creeks, providing much needed thermal refuge and rearing habitat for juvenile Chinook salmon and steelhead each summer.

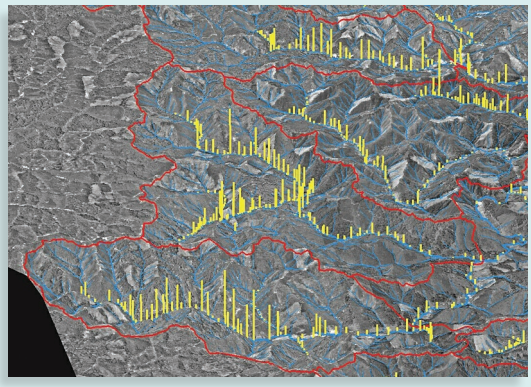
Prior to closing the diversion (note the width of the river)

After the diversion was closed

Oregon—Oregon Watershed Enhancement Board (OWEB) Rapid Bio-Assessments

PCSRF funds have supported the use of Rapid Bio-Assessments in several areas of the Oregon Coast for coastal coho salmon. Rapid Bio-Assessments are used to identify the current spatial distribution of individual species to evaluate biological conditions within a watershed. Assessments are multi-year projects and attempt to sample from the mouth of the river to the headwaters to document juvenile salmon abundance, their distribution, and previously undocumented barriers. The methodology includes surveying one out of every five pools for juvenile coho, Chinook, chum, steelhead and cutthroat trout. The map below depicts the location and relative numbers of juvenile fish found in the Green River basin. These types of maps can be combined with information on known barrier locations to help identify those that may be partial or complete blockages to fish passage.

Oregon has experienced a high rate of landowner participation contributing to survey results on several hundred stream miles. The detailed baseline data are used to identify salmon density hot spots and key rearing sites within the watersheds. Juvenile salmon distribution and abundance data, along with these maps, provide information that is used to identify the primary limiting factors and assist in the prioritization of basin restoration strategies.



Relative abundance of juveniles found at selected locations in the Green River Basin

Biologist conducting snorkel survey of juvenile fish

Mid Term Goal: Improved Status of ESA-listed Salmon ESUs/DPSs

Through the PCSRF, NMFS works closely with state, tribal, and local partners to help reverse the declining trend in abundance of many Pacific salmon and steelhead stocks observed over the past several decades. The PCSRF provides resources for habitat restoration and protection that can assist in sustaining the species when external conditions produce high and low population cycles. There are 17 ESUs and 11 DPSs currently listed as threatened or endangered under the ESA. Of these, 20 have more than 10 years of recent data that can be used to assess trends, with most of these data covering the 1995-1996 to 2005-2006 timeframe. Out of these 20, 17 show stable or increasing population trends. Exhibit 3 lists the ESUs and DPSs, showing those with adequate recent data to assess trends, and noting those in which populations show stable or increasing trends.

Exhibit 3: ESA-Listed ESUs and DPSs

Recovery Domain	ESU / DPS	Data for 10 Years	Stable or Increasing
Puget Sound	Ozette Lake Sockeye	•	•
	Hood Canal Summer-run Chum	•	•
	Puget Sound Steelhead		
	Puget Sound Chinook	•	•
Willamette/Lower Columbia	Columbia River Chum	•	•
	Lower Columbia River Chinook	•	•
	Upper Willamette River Chinook	•	•
	Lower Columbia River Steelhead	•	•
	Lower Columbia River Coho		
	Upper Willamette River Steelhead	•	•
Interior Columbia	Snake River Sockeye	•	
	Upper Columbia River Spring Chinook	•	•
	Snake River Fall Chinook	•	•
	Snake River Spring/Summer Chinook	•	
	Upper Columbia River Steelhead	•	•
	Middle Columbia River Steelhead	•	•
	Snake River Steelhead	•	•
Oregon Coast	Oregon Coast Coho	•	•
S. Oregon/N. Calif Coast	S. Oregon /N. California Coast Coho	•	•
Central Valley	Sacramento River Winter Run Chinook	•	•
	California Central Valley Spring Chinook	•	
	California Central Valley Steelhead		
North-Central California Coast	Central California Coast Chinook		
	Northern California Steelhead		
	Central California Coho		
	Central California Coast Steelhead		
S. Central/S. California Coast	S. Central California Coast Steelhead	•	•
	Southern California Coast Steelhead		

Mid Term Goal: Maintained Healthy Salmon Populations

Evaluating progress toward the PCSRF goals of improved habitat and sustainable salmon and steelhead populations requires multiple years of monitoring after project implementation. The PCSRF grantees allocate at least ten percent of their project funding for monitoring and evaluation activities at both project and region-wide scales. Monitoring is an important activity in determining program progress towards short, mid, and long term goals and is essential to species recovery. Monitoring of non ESA-listed salmon and steelhead populations is equally important to assess overall sustainability and to identify when actions may be needed to prevent ESA listing. Project monitoring includes examination of species abundance data through fish marking and overall project effectiveness monitoring. The states of Washington, Oregon, and California are currently involved in the development of Intensively Monitored Watersheds, an experimental method for measuring project effectiveness on a watershed scale.

Long Term Goal: Overall Sustainability of Pacific Salmon

Each recovery domain has a Technical Recovery Team (TRT) charged with providing the technical basis for recovery plans. Recovery plans identify the recovery and restoration actions necessary to address the key factors limiting each population and help to prioritize the implementation of recovery actions. To ensure the development and implementation of recovery plans in the Pacific Coast region, NMFS and the TRTs have worked cooperatively with multiple entities within recovery domains, including government agencies, landowners, and other interested parties involved in salmon and steelhead recovery. These plans will play important roles in progress toward recovery and long term salmon and steelhead sustainability. To date, ESA recovery plans have been completed for four ESU/DPSs: Puget Sound Chinook, Hood Canal Summer Chum, Upper Columbia River Spring Chinook, and Upper Columbia River Steelhead.

Funding Details

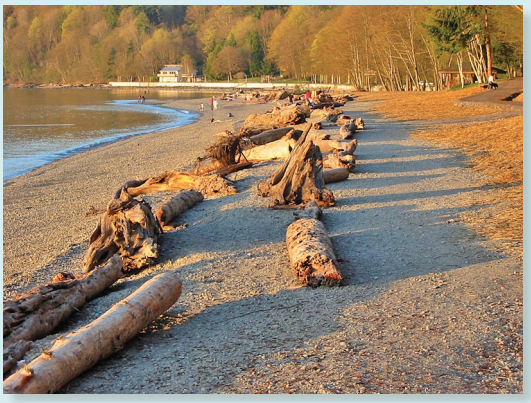
Congress appropriates funds to NMFS, which then distributes those funds to the states and tribes (see Exhibit 4). States and tribal entities submit grant applications to NMFS each year for the funding. The states and tribal entities then manage and distribute the NMFS funds to local or tribal entities conducting projects that address PCSRF goals. Several of these projects are described in the sidebars of this report. The federal and state matching funds are further

Washington—Seahurst Park, Nearshore Puget Sound Habitat

The Washington Recreation and Conservation Office provided PCSRF funding to the City of Burien to restore 1000 feet of nearshore habitat along Puget Sound. Since being armored in the 1970s, beach elevations in Seahurst Park have dropped three to four feet due to wave scour and the disconnection of the beach from primary sediment sources. These changes have significantly degraded the functional quality of the beach as habitat for salmon and the organisms they depend on, particularly forage fish. The project entailed removing shoreline armoring and restoring natural beach slopes and substrate grains sizes in the south section of Seahurst Park.

The project removed a gabion seawall (a seawall composed of a pile of metal-meshed rock baskets) and scattered quarry spall (small rocks) throughout the intertidal zone. Subsequent projects will restore riparian vegetation and remove armoring along the remainder of the park. The goal is to ultimately restore self-sustaining nearshore habitat and ecological processes within the 169 acre park (nearly a mile of shoreline) to support salmon and steelhead populations. Habitat diversity and function are being restored for bull and cutthroat trout and Chinook, chum, pink, sockeye, steelhead, and coho salmon.

Before



After

Exhibit 4.a: Total Congressional Appropriation of PCSRF (in Millions)

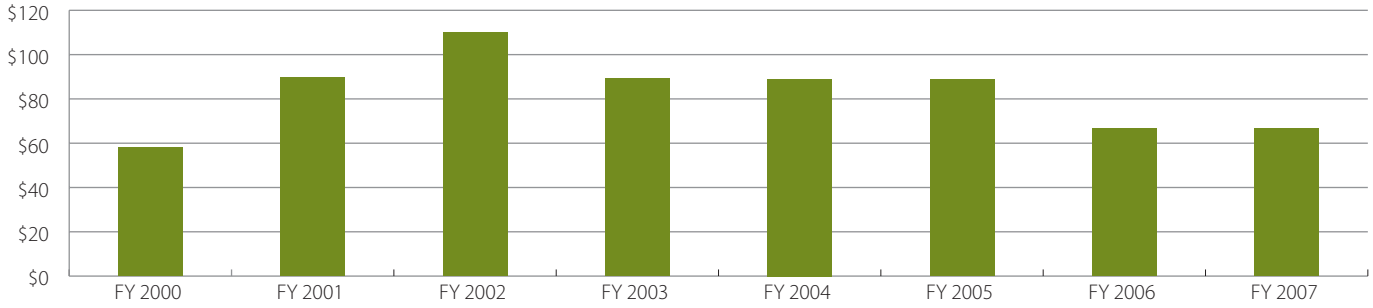


Exhibit 4.b: NMFS PCSRF Allocations to States and Tribes (in Millions)

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	**Total**
Washington	$18.0	$30.2	$34.0	$27.8	$26.0	$24.6	$23.7	$24.1	$208.4
Alaska	$14.0	$19.5	$27.0	$21.9	$20.6	$23.7	$21.7	$16.7	$165.1
California	$9.0	$15.1	$17.0	$13.9	$13.0	$12.8	$6.4	$7.9	$95.1
Oregon	$9.0	$15.1	$17.0	$13.9	$13.0	$12.8	$6.4	$7.3	$94.5
Idaho	•	•	•	•	$4.9	$4.4	$2.2	$2.8	$14.3
Pacific Coastal Tribes	$6.0	7.4	$11.0	$8.9	$8.4	$7.9	$4.9	$6.1	$60.6
Columbia River Tribes	$2.0	$2.5	$4.0	$3.0	$3.1	$2.5	$1.2	$1.7	$20.0
Total	$58.0	$89.8	$110.0	$89.4	$89.0	$88.7	$66.5	$66.6	$658.0

Pacific Coast Tribes—Native Steelhead Conservation in the Elwha River

The Lower Elwha Klallam Tribe, in collaboration with the Washington Department of Fish and Wildlife, the National Marine Fisheries Service, and the National Park Service, is developing a hatchery broodstock program to preserve the native winter steelhead population in the Elwha River, on the Olympic Peninsula in northwestern Washington.

Two hydroelectric dams constructed in the early 1900s have blocked fish passage and confined anadromous salmon and steelhead production to the lower five miles of the river. The dams are scheduled for removal starting in 2009 to re-establish access to pristine habitat in the upper river, located in Olympic National Park. Dam removal will likely result in dramatic changes in the river, currently inundated downstream, as the natural flow regime is re-established and sediment now trapped behind the dams moves through the system.

To assure persistence of the critically depressed native winter steelhead population in the Elwha, a proportion of eggs spawned naturally in the lower river are being collected and reared in the tribal hatchery to maturity. The wild, native origin of steelhead reared in the hatchery is confirmed by DNA analysis. The captive brood stock will be maintained in the hatchery until habitat in the lower river has stabilized, after dam removal. Progeny from the captive brood may then be introduced into suitable habitat in the upper river to promote re-colonization and eventual recovery of native steelhead in the wild.

supplemented by private and local contributions at the project level, including additional financial resources, volunteer time, and other in-kind donations. These local contributions are important to the success of the PCSRF, but are often difficult to quantify. Exhibit 5 identifies the total amount of PCSRF and known state-matching funds committed for salmon and steelhead recovery (not including local and sponsor match). The average of the state-match funds committed for California, Idaho, Oregon, and Washington over the last seven years is approximately 45% of the PCSRF funds expended in these states.

Exhibit 5: Fund Distribution by States and Tribes (FY 2000 to December 2007)

California—Campbell Creek / Gannon Slough Channel Restoration

Campbell Creek, located in northwestern California, originally ran through a ditch along a highway and became Gannon Slough, then ran through diked former tidelands (grazed by cattle) and crossed back under the highway into Humboldt Bay. Physical barriers and the lack of instream habitat prevented fish passage for threatened steelhead, Chinook and coho salmon, and cutthroat trout.

Using PCSRF funds administered through the California Department of Fish and Game (CDFG) Fisheries Restoration Grants Program, the City of Arcata transformed Campbell Creek/Gannon Slough. The creek was freed from the ditch and realigned, creating 910 feet of meandering stream and space for 10 log structures which provide habitat and protection for resident fish. A new tidegate facilitates the passage of salmon and trout through the slough under the highway and preserves freshwater habitat. An upstream culvert providing passage under the highway was enhanced by installing a series of rock grade control structures that created pools for the fish. Cattle exclusion fencing was installed to keep cattle from the new eight acres of riparian habitat. Approximately 3,000 trees were planted to provide shade, stream bank structure, future instream habitat and organic material to jumpstart the aquatic food chain. The project was completed with help from almost 100 volunteers who planted trees during a series of community work parties.

Community volunteers planting trees on Campbell Creek

Alaska—Salmon in the City

The Municipality of Anchorage has implemented a multi-agency stewardship initiative called Salmon in the City, which provides an example of effective salmon restoration in an urban setting. Salmon in the City draws together diverse perspectives and fosters an integrated understanding of the economic, cultural, ecological and recreational importance of sustaining Anchorage's salmon legacy. Several projects are underway to remove barriers to fish passage, maintain and restore riparian habitats, and increase public involvement in salmon and watershed stewardship in Anchorage. In addition to these projects with immediate on-the-ground results, Salmon in the City is also working to formalize city policies and procedures to sustain salmon and watershed health for the long term.

Salmon in the City outreach projects focus on inspiring the Anchorage public to become stewards of salmon and creek resources. Since 2005, 93 outreach events reaching nearly 20,000 residents were conducted. The first annual Salmon in the City Festival was held in August 2007 and programs for youth involvement in sustainable salmon and watershed stewardship activities were initiated. In 2007, over 100 hours of Salmon in the City educational public service announcements were broadcast on the local cable channel. An education program, located along the 7-mile Campbell Creek Interpretive Trail, increases public awareness of the creek's salmon resources, the importance of riparian buffers, and how the community can sustain the health of the Campbell Creek watershed.

The initiative fosters strong public support and proactive opportunities for community involvement for rejuvenating and sustaining local salmon populations. Through its activities, the program is enhancing resident and visitor fishing, recreational, and educational experiences while promoting stewardship of wild salmon, watersheds, and natural spaces. Salmon in the City is building pride within the Anchorage community as initiative partners work together to protect the wild salmon that uniquely connect local residents to their past, present, and future.

Volunteers planting native plants in the riparian zone

Most of the state and tribal entities have established processes for screening and selecting priority projects and distributing the funds to local entities. In addition to PCSRF funds, states provide significant levels of matching funds.[7] The states of Washington, Oregon, California, Idaho and Alaska each conduct a competitive process to award PCSRF funds. Because of the competitive funding cycles, many of the PCSRF funds are committed to projects in the year following the availability of appropriations. Projects may be funded for operations over several years, and completion of projects may be affected by construction windows, the seasonal nature of restoration work, and processes required for issuing contracts and securing permits. In general, three to five years pass between fund appropriation and completion of projects. Each state has a different process, but most include rigorous reviews of the scientific and technical merit of proposals and incorporate public and stakeholder input.

Summary

Since program inception, PCSRF funds have been used effectively by states and tribes to contribute to the recovery of many declining salmon and steelhead populations and to help maintain healthy populations. Much of this work has been done by improving deteriorated habitat in streams and watersheds throughout the Pacific Coast region. Habitat conservation and restoration, improved knowledge and understanding of salmon and steelhead viability and prioritization of recovery actions are contributing to effective results. Through the PCSRF and efforts and contributions of state and tribal partners, progress is being made in the overall recovery of Pacific salmon and steelhead. Continued commitment, collaboration, and resources are required to achieve the overarching goal of full recovery and sustainability.

This continual improvement and refinement in the assessment of program performance will enhance the allocation of PCSRF resources. In 2003 and 2006, the PCSRF program underwent an Office of Management and Budget Performance Analysis and Rating Tool (PART) review. The program received a "moderately effective" rating in 2006, the second-highest rating given, and an improvement over the "results not demonstrated" rating in 2003. Through the evolution of the program, the PCSRF state and tribal partners and NMFS continue to develop and implement watershed recovery plans that provide direction and accountability for effective use of the PCSRF to achieve the full recovery, restoration, and sustainability of Pacific salmon and steelhead populations.

[7] Tribes are not required to provide matching funds.