Chapter 4: State and Tribal Salmon Recovery Efforts



This chapter presents a summary of how individual state and tribal entities are distributing PCSRF funds to protect and restore salmon populations. Descriptions are provided for each state or tribal entity on the allocation of PCSRF funds to advance the program's objectives. The resources expended and number of projects supported are reported below. In most places, total dollar amounts have been rounded. Given that processes and timing for distributing funds vary among states and tribes, the funding amounts committed to projects do not reflect all funds granted by NMFS.

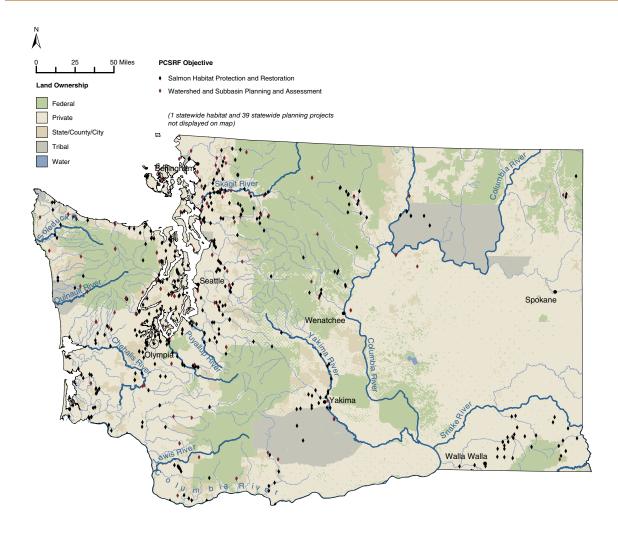
Washington

Washington Fund Distribution Process

Washington PCSRF funds were provided to the Salmon Recovery Funding Board (SRFB), a body created by the State Legislature in 1999 to effectively invest federal and state funds for salmon habitat protection and restoration projects and related activities that produce sustainable and measurable benefits for salmon and their habitat (http://www.iac.wa.gov/srfb). The SRFB supports various local salmon recovery efforts in Washington. Recovery boards in five regions provide the focus and visibility needed to mobilize action on behalf of salmon recovery, coordinate the myriad activities involved in salmon recovery, and ensure recovery plans are developed and adopted. The SRFB's role is to select the best salmon habitat project proposals and activities reflecting local priorities and the best available science. It conducts its work in consultation with the Governor and according to the State salmon strategy, *Extinction is Not an Option* (http://www.governor.wa.gov/gsro).

State and local governments, private landowners, conservation districts, tribes, non-profit organizations, and special purpose districts are eligible to receive project funding for habitat restoration; acquisition of land, rights, and easements; and plans and assessments. Projects are submitted to or generated by one of the 26 geographically distributed "lead entity groups," which are organizations of local or regional citizen committees that prioritize local habitat projects. Each lead entity group submits a prioritized list to the SRFB after a local technical advisory group and a citizen committee group have reviewed it. The SRFB uses a technical panel of scientists to review project proposals for scientific and technical merit and makes final funding decisions based on published criteria in open public meetings. SRFB funds are administered through the Office of the Interagency Committee. The locations of PCSRF and state matching fund habitat restoration and watershed planning projects in Washington through December 2003 are shown in Exhibit 4–1.





Washington PCSRF Distribution Summary

Washington committed most of its share of the PCSRF funds to salmon habitat protection and restoration projects and watershed and subbasin planning and assessment projects, with the remaining funds supporting salmon research, monitoring, evaluation, and enhancement projects. The \$101.4 million of PCSRF funds committed by Washington to projects and activities was matched by \$53.4 million in state funds (53 percent match on federal funds), which the SRFB allocated exclusively for habitat projects and planning and assessment projects. A summary of Washington's distribution of PCSRF and matching state funds by objective is shown in Exhibit 4–2. Not all of Washington's PCSRF appropriated funds were committed as of December 31, 2003. Details about Washington's projects by objective are shown in Exhibit 4–3.



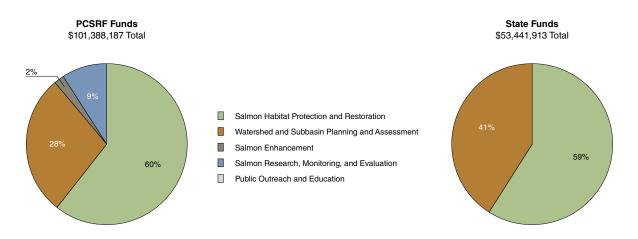


Exhibit 4–3: Washington's Projects by Objective (funds in millions)

Objective	Projects	PCSRF Funds	State Funds
Salmon Habitat Protection and Restoration	335	\$61.15	\$31.62
Watershed and Subbasin Planning and Assessment	141	\$28.34	\$21.82
Salmon Enhancement	2	\$2.53	\$0.00
Salmon Research, Monitoring, and Evaluation	5	\$9.37	\$0.00
Public Outreach and Education	0	\$0.00	\$0.00
Total	483	\$101.39	\$53.44

Washington Accomplishments

With the support of PCSRF, Washington made key investments in efforts to recover salmon. Federal and state funds distributed by the SRFB have enabled Washington to make significant progress in five areas:

- > Grassroots Responsibility and Capacity. To build on-the-ground support and capacity for long-term salmon recovery needs, the SRFB helped organize and fund 26 community-based groups of citizens, landowners, scientists, tribes, and elected officials in salmon watersheds. To assist local efforts, Washington has provided the *Roadmap for Salmon Habitat Conservation at the Watershed Level*, available at http://www.governor.wa.gov/gsro/watershed/roadmap.htm, and the *Guidance on Watershed Assessment for Salmon*, which is also available online at http://www.governor.wa.gov/gsro/watershed/watershed.htm.
- Recovery Planning. Salmon recovery plans will be completed by June 2005 for the Puget Sound, Lower Columbia, Middle Columbia (or Yakima), Upper Columbia, and Snake River basins, and a separate recovery plan will be submitted for Hood Canal summer chum. Washington has developed a framework to guide salmon recovery planning in a manner that lends consistency

- among various planning processes. It is the *Washington Outline for Recovery* at http://wdfw.wa.gov/recovery/salmon_recovery_plan_model_dec03.pdf.
- > **Early Action.** Fish passage barrier removal projects funded at least in part by PCSRF have opened an estimated 360 miles of salmon habitat. In addition, an estimated 30 miles of stream riparian area have been restored. The Forest and Fish Agreement has increased protection for 60,000 miles of streams. Harvest changes have increased the number of spawning fish. Scientific management plans for most hatcheries have been completed, and hydropower dams are undergoing fish-friendly license renewals.
- Monitoring. To increase accountability for investments in salmon recovery, the SRFB funded two programs that implement recommendations in the *Washington Comprehensive Monitoring Strategy and Action Plan for Watershed Health and Salmon Recovery*, which is available at http://www.iac.wa.gov/srfb/docs.htm. The first program involves monitoring fish abundance on a watershed scale to determine whether aggregate investments in habitat protection and restoration are having a detectable and positive effect on fish populations (validation monitoring). The second program is a statistically rigorous approach to test the effectiveness of nine types of projects using independent observers. In addition, the *Assessment of Monitoring Methods and Benefits for SRFB Projects and Activities (June 2003)*, also developed for the SRFB, assessed the effectiveness of 143 completed salmon recovery projects and activities funded with SRFB funds. This document is available at http://www.iac.wa.gov/documents/SRFB/Monitoring/SRFB_Final_Report_June-2003.pdf.
- > **Cost-Effectiveness.** Since 2000, PCSRF has helped leverage an estimated \$60 million in resources—more than the value of the State's share—and about 38 percent of the total value of federal and state funding provided for habitat protection and restoration during that time.

These five areas of accomplishment represent significant progress. Strong federal and state commitment to salmon recovery has enabled Washington to create institutions along watershed and bioregional boundaries. These efforts have allowed new participants to come to the table, to embrace principles of ecosystem restoration and guide citizens in their application, to improve habitat conditions for salmon across Washington, and to improve management of natural resources and water-based infrastructure. Despite this progress, recovery of ecosystem functions will take many years and continued funding support.

Oregon

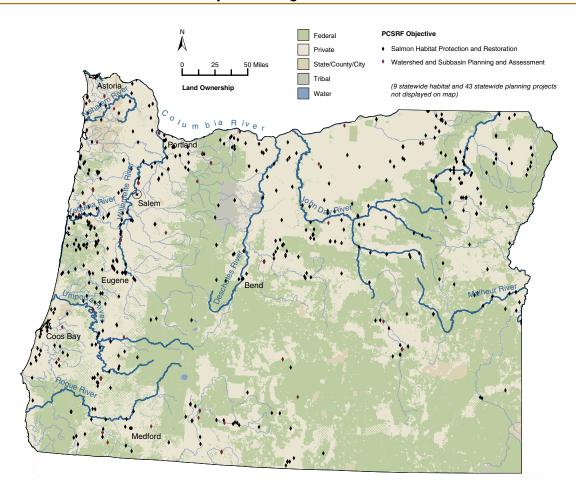
Oregon Fund Distribution Process

PCSRF funds for Oregon were provided to the Oregon Watershed Enhancement Board (OWEB), which distributed the PCSRF funds in tandem with state restoration funds. This approach provides flexibility to target investments to both meet local needs and achieve significant, long-term improvements in salmon and watershed health. Guided by the Oregon Plan, Oregon invested up to \$15 million annually from state lottery funds in on-the-ground watershed and salmon habitat improvement projects. Since the majority of state funds must be spent on habitat projects, PCSRF funds provide OWEB with important flexibility to support watershed councils, watershed assessments, monitoring, and education and outreach, all of which are essential to achieving restoration of salmon and watershed health. By integrating use of the PCSRF funds into Oregon's existing infrastructure, OWEB is able to substantially enhance the effectiveness of the Oregon Plan in recovering salmon.

In 2003, due to the fiscal crisis faced by the State, PCSRF funds were used to ensure the continuity and integrity of ongoing monitoring, data collection, and technical assistance programs, in addition to supporting the infrastructure of citizen watershed groups that plan and implement watershed restoration projects.

OWEB achieves strategic investment of public funds and cost-effective restoration through rigorous technical review of grant proposals, monitoring of restoration projects, and balanced board leadership and policy direction. OWEB's project selection process is guided by a 17-member board composed of one representative from each of Oregon's natural resource commissions, a tribal representative, five federal agencies, the land grant university extension service, and five citizens from different regions of Oregon. Criteria for assessing proposals and awarding funds are established by Oregon administrative rule, and are applied through regional teams composed of federal and state natural resource field staff with first-hand knowledge of local conditions. These teams use the criteria in rules and their collective expertise to review grant applications and make funding recommendations to OWEB. Exhibit 4–4 shows the locations of habitat restoration and watershed planning projects in Oregon through December 2003.





Oregon PCSRF Distribution Summary

Oregon committed about three-quarters of its PCSRF funds to projects in two program objectives: watershed and subbasin planning and assessment and salmon research, monitoring, and evaluation, as shown in Exhibit 4–5. Oregon used the vast majority of its \$73.3 million in matching state funds (138 percent match on federal funds) for salmon habitat protection and restoration projects. As a result, 57 percent of Oregon's total federal and state spending on salmon recovery has supported habitat protection and restoration projects, with PCSRF funds providing most of the support for projects in other program objectives. Oregon's projects by objective are shown in Exhibit 4–6.

Exhibit 4-5: Oregon's Distribution of PCSRF and State Funds



Exhibit 4–6: Oregon's Projects by Objective (funds in millions)

Objective	Projects	PCSRF Funds	State Funds
Salmon Habitat Protection and Restoration	575	\$7.16	\$64.34
Watershed and Subbasin Planning and Assessment	486	\$22.78	\$6.43
Salmon Enhancement	5	\$3.44	\$0.00
Salmon Research, Monitoring, and Evaluation	131	\$14.59	\$2.16
Public Outreach and Education	129	\$5.06	\$0.42
Total	1,326	\$53.03	\$73.35

Oregon Accomplishments

PCSRF provided crucial support to OWEB in implementing the *Oregon Plan for Salmon and Watersheds* (Oregon Plan) (http://www.oregon-plan.org), a comprehensive statewide effort initiated in 1997. Two key activities supported by PCSRF include improving local restoration capacity and monitoring habitat conditions and fish populations, as described further below.

- > Investment in Local Restoration Capacity. Using PCSRF funds, OWEB (http://www.oweb.state.or.us) provides staffing support to increase the capacity of soil and water conservation districts (45 statewide) and watershed councils (92 statewide) to conduct watershed restoration activities. These local groups have engaged citizens from all walks of life to work cooperatively for salmon recovery and watershed restoration. The soil and water conservation districts are working to create and implement Agricultural Water Quality Management Area Plans to address agricultural impacts to water quality. The watershed councils have organized local constituents and conducted watershed assessments to identify conditions needing improvement to address listed fish species' declines; they are also the primary vehicle for implementing millions of dollars in voluntary restoration projects on privately owned lands each year to improve salmon habitat and water quality. Guidance is provided in the *Oregon Aquatic Habitat Restoration and Enhancement Guide*, available online at http://www.oweb.state.or.us/publications/habguide99.shtml, and the *Oregon Watershed Assessment Manual*, which is at http://www.oweb.state.or.us/publications/wa manual99.shtml.
- > Monitoring Investments. OWEB used PCSRF funds to expand the monitoring of fish population and habitat conditions of anadromous fish in Oregon. OWEB has, for example, cooperated with other state and federal agencies to conduct random sample-based monitoring of fish seasonal abundance, macro invertebrates, water quality, and instream and riparian habitat conditions throughout the Lower Columbia Basin. In addition, OWEB is using PCSRF funding to evaluate progress toward recovering listed salmon stocks on the North Coast of Oregon and to conduct an evaluation of coastal wetland losses from the Oregon coastal lowlands. These investments in information will help to steer future investments in restoration.

California

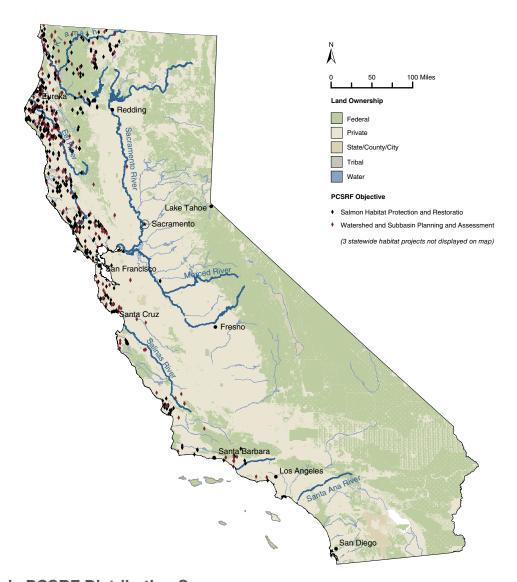
California Fund Distribution Process

Through the California Department of Fish and Game (CDFG), the Fisheries Restoration Grant Program (FRGP) awards project grants through an annual competitive process involving five levels of review by Technical Review Teams, regional field evaluators, the California Coastal Salmonid Restoration Grants Peer Review Committee, and the Director of the CDFG. Through this process, reviewers evaluate the biological soundness and the technical and cost effectiveness of proposals and make recommendations for funding based on coastwide and regional goals and priorities. The program has been continually adapted since it began in 1981 to improve administrative efficiency and incorporate advances in restoration science. In particular, watershed restoration plans have helped focus project proponents on the areas of greatest need, and have helped engage a wider variety of stakeholders in the restoration process.

To track projects over time, CDFG joined NMFS and the Pacific States Marine Fisheries Commission to develop the California Habitat Restoration Project Database (CHRPD) to manage and disseminate data about habitat restoration projects in California benefitting anadromous fish. In addition to serving as a comprehensive repository for information about California habitat restoration projects, the georeferenced project locations in the database enable geographic analyses of projects, aiding analysis of past trends and planning of future restoration work. The CHRPD database and the FRGP solicitation now include the recently developed PCSRF performance indicators described previously. Information on the FRGP and a new brochure describing the program can be found at http://www.dfg.ca.gov/nafwb/fishgrant.html. Exhibit 4–7

shows the locations of habitat restoration and watershed planning projects in California through December 2003.

Exhibit 4-7: Location of PCSRF Projects in California



California PCSRF Distribution Summary

As shown in Exhibit 4–8, CDFG committed the majority of its PCSRF and matching state salmon recovery funds, a total of \$48.4 million, to habitat protection and restoration projects. Another priority for funding has been watershed and subbasin planning and assessment projects. Overall, California augmented its \$39.3 million PCSRF funds through FY 2002 with \$31.8 million in state funds (a nearly 81 percent match on federal funds). Due to late receipt of its FY 2003 PCSRF grant, California did not commit any of its FY 2003 allocation to projects in 2003. This will occur in calendar year (CY) 2004. California's projects by objective are shown in Exhibit 4–9.



Exhibit 4-8: California's Distribution of PCSRF and State Funds

Exhibit 4-9: California's Projects by Objective (funds in millions)

Objective	Projects	PCSRF Funds	State Funds
Salmon Habitat Protection and Restoration	438	\$25.78	\$22.66
Watershed and Subbasin Planning and Assessment	198	\$9.34	\$4.77
Salmon Enhancement	21	\$0.18	\$0.37
Salmon Research, Monitoring, and Evaluation	67	\$2.49	\$3.33
Public Outreach and Education	70	\$1.47	\$0.64
Total	794	\$39.26	\$31.77

California Accomplishments

The FRGP focuses on restoring anadromous fish habitat to ensure the survival and protection of salmon and steelhead in coastal areas of California. The PCSRF augmented state funds, and the combined funds have helped California improve its ability to recover and manage coastal salmon. Federal and state funds provide resources for coastal salmon recovery efforts implemented by non-profit organizations, local public agencies, small businesses, and private individuals. California initiated about 800 salmon recovery projects using federal and state funds. CDFG guidance documents for these restoration efforts include *Recovery Strategy for California Coho Salmon*, which is available at http://www.dfg.ca.gov/nafwb/cohorecoverydoc.html, and *California Salmonid Stream Habitat Restoration Manual* at http://www.dfg.ca.gov/nafwb/pubs/manual3.pdf.

The California FRGP funds have been aimed at many projects, including restoring and rehabilitating degraded or blocked freshwater habitat. In addition, the funds have helped to strengthen watershed efforts along the coast of California, and have expanded local capacity to conduct watershed assessments and develop watershed plans. FRGP funds are catalyzing an effort to create a blueprint—a California version of the "Oregon Plan" (described above)—for anadromous fish monitoring on the coast of California. Furthermore, California used PCSRF and state funds to develop validation monitoring protocols to evaluate the effectiveness of efforts to restore and conserve anadromous fish habitat. These protocols are reported in the *California Coastal Salmonid Restoration Monitoring and*

Evaluation Program: Interim Restoration Effectiveness and Validation Monitoring Protocols, available at http://www.dfg.ca.gov/nafwb/pubs/2003/200303_Interim_Protocol_Manual.pdf. Once formalized in the spring of 2005, these protocols will be incorporated into an updated California Salmonid Stream Habitat Restoration Manual.

Alaska

Alaska Fund Distribution Process

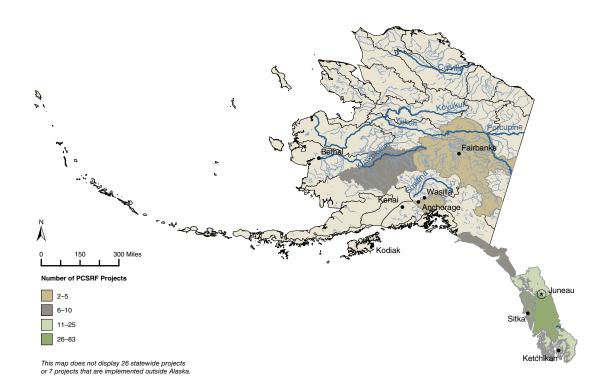
The Alaska Department of Fish and Game (ADFG) administers Alaska's Pacific Coastal Salmon Recovery Funds. The Department established the Southeast Sustainable Salmon Fund (SSSF) in 2000 for management of the PCSRF funds. Funds not Congressionally designated for specific projects in other regions of Alaska have primarily been targeted for the Pacific Salmon Treaty region of Southeast Alaska (the area of Alaska east of Cape Suckling). PCSRF funds are used for projects that complement the Sustainable Fisheries Policy for the State of Alaska adopted by the Alaska Board of Fisheries in March 2000, and for implementation of the 1999 Pacific Salmon Treaty. ADFG provides online information on its use of PCSRF funds at http://www.adfg.state.ak.us/special/sssf.php. The following sites include links to and information on Alaska's Sustainable Salmon Policy, http://www.adfg.state.ak.us/special/susalpol.pdf, and the Pacific Salmon Treaty and Commission, http://www.psc.org/Index.htm.

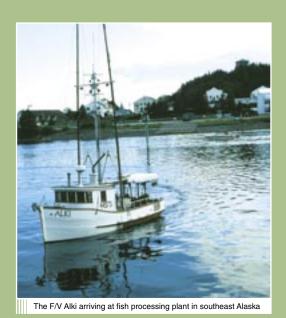
ADFG has two panels to provide input on the use of the funds. An Advisory Panel is composed of the commissioners of the Department of Natural Resources and the Department of Environmental Conservation, and representatives of the Governor's Office. An interagency Science Coordination Panel includes representatives from NMFS, the U.S. Environmental Protection Agency, the U.S. Forest Service, the U.S. Fish and Wildlife Service, state agencies, and the University of Alaska. The Advisory Panel and the Science Coordination Panel meet to determine high priority issues and recommend project funding for four primary activities: 1) salmon research and monitoring, 2) salmon habitat stewardship and restoration, 3) increasing economic opportunities for Southeast Alaska salmon fishermen (which is part of the salmon enhancement program objective for PCSRF), and 4) cooperative salmon and habitat projects, including projects with Columbia River tribes and Canada. The distribution of Alaska projects is shown in Exhibit 4–10.

Alaska PCSRF Distribution Summary

As shown in Exhibit 4–11, ADFG committed almost half of its PCSRF funds to salmon enhancement projects, with the majority of the remaining funds spent on salmon research, monitoring, and evaluation projects and watershed planning and assessment projects. Alaska's \$62.3 million PCSRF commitments leveraged an additional \$6.3 million in state funds, all for research, monitoring, and evaluation projects. Alaska's projects by objective through December 2003 are shown in Exhibit 4–12. Due to the late receipt of its FY 2003 PCSRF grant, Alaska had not committed about 90 percent of its FY 2003 allocation to projects by December 2003. This will occur in CY 2004.

Exhibit 4-10: PCSRF Projects in Alaska





Salmon Enhancement

Alaska—Economic Development Matching Grant Program in Southeast Alaska

An important component of the long term sustainability of salmon and salmon habitat in Alaska is the sustainability of the fishing industry. Sustainability depends on advocacy of salmon fishermen, the availability of salmon processing and related industries, and healthy salmon-dependent communities. While Alaska's wild salmon runs remain healthy, the salmon industry has been significantly affected by management regimes under the Pacific Salmon Treaty and by farmed salmon in the marketplace.

As part of the PCSRF funding, Alaska implemented an Economic Development Matching Grant Program to improve the sustainability and viability of Alaska's wild salmon fishing industry through infrastructure investment for product quality, product diversity, and market access. The program is designed to provide support for salmon industry infrastructure improvements, including chilling, freezing, value-added processing, and fish buying capacity. Funds currently have been approved for 12 to 15 projects located throughout Southeast Alaska. Grantees are selected through a competitive grant process directed by the Alaska Departments

of Fish and Game, Community and Economic Development, and Labor and Workforce Development, and the Office of the Governor. All grantees must provide a cash match of 25–50 percent.



Exhibit 4-11: Alaska's Distribution of PCSRF and State Funds

Exhibit 4–12: Alaska's Projects by Objective (funds in millions)

Objective	Projects	PCSRF Funds	State Funds
Salmon Habitat Protection and Restoration	4	\$2.65	\$0.00
Watershed and Subbasin Planning and Assessment	36	\$10.82	\$0.00
Salmon Enhancement	39	\$29.79	\$0.00
Salmon Research, Monitoring, and Evaluation	77	\$16.13	\$6.35
Public Outreach and Education	18	\$2.87	\$0.00
Total	174	\$62.26	\$6.35

Alaska Accomplishments

Alaska established more than 170 projects using PCSRF funds. These projects are assisting the State with important salmon research, assessment, monitoring, and habitat restoration, as well as providing economic support for salmon fishermen and salmon-dependent communities affected by the management provisions of the 1999 Pacific Salmon Treaty Agreement. The increased levels of assessment and monitoring significantly aid Alaska in ongoing efforts to sustain salmon populations and salmon habitat. In addition, projects sustaining cultural and economic opportunities help assure that people dependent upon salmon continue to be strong advocates for the sustainable management of salmon resources and habitat.

Columbia River Tribes

Columbia River Tribes Fund Distribution Processes

NMFS distributed PCSRF funds to six Columbia River tribes and/or their tribal commission to support salmon conservation and recovery in the Columbia River basin. The Columbia River Inter-Tribal Fish Commission (CRITFC) received the majority of Columbia River Tribes PCSRF funds for

the Nez Perce Tribe, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation, and the Confederated Tribes and Bands of the Yakama Nation. NMFS also provided PCSRF funds directly to the Colville Confederated Tribes and the Shoshone-Bannock Tribes for specific projects proposed by the tribes.

CRITFC distributes its PCSRF funds to member tribes based on the MOU with NMFS and salmon restoration strategies described in *Wy-Kan-Ush-Mi Wa-Kish-Wit*. A Tribal Science Review Team evaluates project proposals from the tribes or the Commission itself to ensure projects are consistent with the MOU, and tribal staff take final project proposals to their respective Fish and Wildlife Committee or Natural Resources Committee for public review and approval before presenting the proposals to the Commission.

Columbia River Tribes PCSRF Distribution Summary

The Columbia River tribes used the majority of their PCSRF funds on salmon habitat protection and restoration projects and on salmon enhancement projects, as shown in Exhibit 4–13. The \$11 million in PCSRF funds for Columbia River tribes supported 126 projects in all five program objectives. The Columbia River tribes' projects by objective are shown in Exhibit 4–14. Not all funds had been committed to projects as of December 31, 2003.

Salmon Enhancement

Columbia River Tribes—Fish Production Assessment on the Warm Springs Reservation

As part of a multi-year project, several monitoring activities have been conducted related to the production of anadromous salmonids from Reservation streams. A mark/recapture escapement estimation of spring chinook, steelhead, redband, and bull trout, along with index area redd counts have been conducted in Shitike Creek and Warm Springs River basins. Snorkeling in 25 index transects to: (1) obtain juvenile abundance estimates, and (2) observe habitat utilization and species interaction of juvenile salmonids have been completed in Reservation streams. The operation of migrant traps to estimate juvenile salmonid migration is an additional part of this monitoring effort.



Snorkeling surveys of juvenile salmonids

Outplanting and evaluation of adult spring chinook into Shitike Creek is a further objective of the project. In 2001, 265 adult spring chinook were outplanted at five sites on Shitike Creek. Detailed monitoring of the Shitike Creek chinook supplementation outplanting was conducted, including species interaction observations, collection of tissue samples for genetic pedigree analysis and radiotelemetry of outplanted adults. Random pools were snorkeled to compare densities with index abundance transects. Data collected are currently being analyzed.

Exhibit 4-13: Columbia River Tribes' Distribution of PCSRF Funds

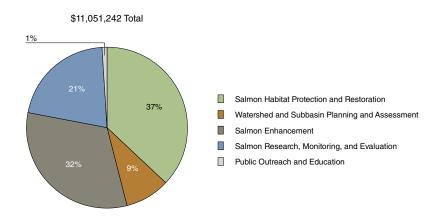


Exhibit 4–14: Columbia River Tribes' Projects by Objective (funds in millions)

Objective	Projects	PCSRF Funds
Salmon Habitat Protection and Restoration	62	\$4.11
Watershed and Subbasin Planning and Assessment	13	\$0.95
Salmon Enhancement	22	\$3.55
Salmon Research, Monitoring, and Evaluation	24	\$2.31
Public Outreach and Education	5	\$0.13
Total	126	\$11.05

Columbia River Tribes Accomplishments

With the support of PCSRF, Columbia River tribes have implemented salmon habitat restoration projects that benefited communities across a large geographic area. CRITFC worked collaboratively with other tribes and non-tribal entities such as watershed groups, landowners, and agencies to promote salmon recovery according to the principles of *Wy-Kan-Ush-Mi Wa-Kish-Wit*. The Columbia River tribes have demonstrated success because of their relationships with federal, state, and local entities in cooperative recovery efforts.

Pacific Coastal Tribes

Pacific Coastal Tribes Fund Distribution Process

NMFS distributed PCSRF funds allocated for Pacific coastal tribes to 29 tribes and/or their respective tribal commissions in Washington, Oregon, and California. The funding was distributed to the Northwest Indian Fisheries Commission (NWIFC) on behalf of 20 western Washington treaty Indian

tribes, the Klamath Inter-Tribal Fish and Water Commission (KRITFWC) on behalf of four Klamath River basin tribes in northern California and southern Oregon, the Round Valley Indian Tribes in the Eel River Basin in California, the Confederated Tribes of the Chehalis Reservation in Washington, the Coquille Indian Tribe in Oregon, the Confederated Tribes of Grand Ronde in Oregon, and the Confederated Tribes of the Siletz Indians of Oregon. (PCSRF funds were initially provided directly to the Yurok Tribe, Hoopa Valley Tribe, and The Klamath Tribes. In FY 2001, these tribes joined with The Karuk Tribe of California to have the KRITFWC obtain PCSRF funding on behalf of all four Klamath River basin tribes.)

The majority (about 80 percent) of the PCSRF funds allocated to Pacific coastal tribes was provided to the NWIFC on behalf of 20 Northwest treaty Indian tribes. The NWIFC is the western Washington inter-tribal organization created in 1974 to assist tribes in conducting biologically sound fisheries and providing a unified voice on fisheries management and conservation issues. NWIFC member tribes receiving PCSRF funds are the Nisqually, Squaxin Island, Puyallup, Jamestown S'Klallam, Port Gamble S'Klallam, Lower Elwha Klallam, Skokomish, Swinomish, Sauk-Suiattle, Upper Skagit, Tulalip, Makah, Stillaguamish, Muckleshoot, Suquamish, Nooksack, Lummi, Hoh, Quinault, and Quileute Tribes. Working closely with NMFS, the NWIFC has established efficient application and reporting requirements to ensure accountability and the achievement of Congressional and tribal salmon recovery goals. NWIFC technical and policy staff review and monitor tribal proposals to ensure each provides sustainable and measurable benefits for salmon and their habitat. The tribes have flexibility in identifying salmon recovery priorities for tribal watersheds, governments, and communities. At the same time, the tribes' efforts are connected through the NWIFC to regional salmon recovery efforts.

KRITFWC received about 11 percent of PCSRF funds allocated to Pacific coastal tribes on behalf of the Hoopa Valley Tribe, The Karuk Tribe of California, Yurok Tribe, and The Klamath Tribes. Each KRITFWC tribe has one seat on the Board of Directors, which governs the Commission. The KRITFWC Board meets annually to prioritize their PCSRF funding for projects undertaken by member tribes in accordance with the MOU between KRITFWC and NMFS.

Research, Monitoring, and Evaluation

Pacific Coastal Tribes—Puyallup Tribe

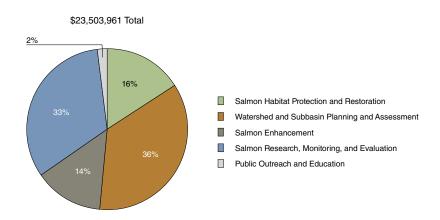
When salmon start returning in the fall, the Puyallup River is obscured by a chalky mix of glacial till, making it almost impossible for the adult spawning salmon to be seen and preventing accurate counts of returns. Starting in the fall of 2003, with the aid of Pacific Coastal Salmon Recovery funding, the Puyallup Tribe of Indians used Dual Frequency Identification Sonar (DIDSON)—an advanced sonar system—to peer though the murky waters.

Images presented by the DIDSON system are black and white and are highly accurate compared to other types of sonar. The images are so accurate that biologists can tell the difference between species. Tracking salmon populations over the years is a basic and critical requirement of assessing recovery. Data provided from this project will help contribute to better understanding of the timing of the salmon run and allow for better fishery management decisions.

Pacific Coastal Tribes PCSRF Distribution Summary

As shown in Exhibit 4–15, the Pacific coastal tribes committed \$23.5 million in PCSRF funds primarily for two activities: watershed and subbasin planning and assessment and salmon research, monitoring, and evaluation. Pacific coastal tribes' projects by objective are shown in Exhibit 4–16. Due to the late receipt of most of the FY 2003 PCSRF grants to the tribes and tribal commissions, about 87 percent of the Pacific coastal tribes FY 2003 funds was not committed to projects as of December 2003. This will occur in CY 2004.

Exhibit 4-15: Pacific Coastal Tribes' Distribution of PCSRF Funds



Research, Monitoring, and Evaluation

Pacific Coastal Tribes—Port Gamble S'Klallam Tribe

The smolt trap on the Hamma Hamma River is a large, water-powered device that safely catches young salmon, allowing the fish to be studied and returned to the river unharmed. It's anchored near the shore of the river just below the site where a tributary reaches the mainstem of the Hamma Hamma. It is part of a PCSRF funded project conducted by the Port Gamble and Skokomish tribes, a local landowner, Long Live the Kings, the Hood Canal Salmon Enhancement Group and the Washington Department of Fish and Wildlife to obtain an accurate count of how many juvenile fish—or smolts—are migrating from the freshwater into the saltwater



The level of smolt production reflects the quantity and quality of freshwater salmon habitat available in the watershed. The information collected about the Hood Canal summer chum population which is listed as threatened under the ESA, is used to forecast future adult salmon returns and determine what is best for the Hamma Hamma River in terms of harvest management, stock enhancement and habitat restoration. Declining chinook, pink, and coho salmon, along with steelhead populations, also will be studied.

Exhibit 4-16: Pacific Coastal Tribes' Projects by Objective (funds in millions)

Objective	Projects	PCSRF Funds
Salmon Habitat Protection and Restoration	83	\$3.65
Watershed and Subbasin Planning and Assessment	84	\$8.45
Salmon Enhancement	22	\$3.18
Salmon Research, Monitoring, and Evaluation	114	\$7.86
Public Outreach and Education	7	\$0.36
Total	310	\$23.50

Pacific Coastal Tribes Accomplishments

Over the past three decades, in response to dwindling salmon populations and a commitment to sustainable fisheries, western Washington tribes and the State of Washington have worked together as co-managers, modifying and reducing harvests to protect individual populations of salmon and reforming hatchery operations to minimize their impacts on wild salmon. Tribes have worked to protect and restore watersheds that support salmon. At the forefront of the effort for salmon recovery in western Washington is the Shared Strategy, a collaborative effort by federal, state, local, and tribal governments, and private sector leaders aimed at creating healthy ecosystems to produce and support wild salmon at a level that will once again sustain commercial, ceremonial, and subsistence harvest.

PCSRF funds provided to western Washington tribes enabled the tribes to begin realizing their appropriate role as central participants in salmon recovery efforts. The NWIFC used PCSRF funds to restore habitat to improve conditions essential to viable salmon populations, to conduct research to increase understanding of what salmon need and how to best provide those needs, to supplement wild salmon stocks without impeding their recovery, and to undertake hatchery reforms to minimize the impacts of artificial propagation on wild salmon. Backed by solid systems of accountability and a strong strategic coordinating function provided by the NWIFC, the tribes ensure salmon recovery resources directly benefit salmon.

Watershed Planning and Assessment

Pacific Coastal Tribes / Washington—Puget Sound Shared Strategy

PCSRF funds have been used to support the Puget Sound Shared Strategy, a collaborative recovery planning effort to restore and protect salmon runs in the region. It involves federal, state, local, and tribal leaders supporting the planning work being done at the watershed level by various groups addressing watershed health and salmon recovery, and the marine and estuarine environments. The Shared Strategy seeks to write a recovery plan that:

- > Represents regional consensus on measurable fish population recovery goals;
- > Integrates needed recovery actions in harvest, habitat, and hatcheries;
- > Includes decision-making that represents joint policy and technical interactions; and
- > Obtains the necessary commitment at all levels to achieve desired results and improve conditions for salmon.

In northern California and southern Oregon, KRITFWC provides a forum for discussions about fisheries and water quality issues in the Klamath and Trinity River Basins. This forum helps to educate and disseminate information concerning the conditions in the watershed basins in these regions and to seek and accept funds to maintain and restore fish populations and habitats. In the fall of 2002, the Klamath River experienced a fish kill of 35,000 adult chinook and coho salmon as the result of low water flows combined with poor water quality. With the support of PCSRF, KRITFWC has been working diligently to study this fish kill and analyze scientific data in hopes of preventing any future fish kills.