

ANNUAL REPORT

SKAGIT FISHERIES ENHANCEMENT GROUP

July 2002 - June 2003



The mission of the Skagit Fisheries Enhancement Group is to build partnerships that educate and engage the community in habitat restoration and watershed stewardship in order to enhance salmonid populations.

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed it is the only thing that ever has." –Margaret Mead, anthropologist

The Skagit Fisheries Enhancement Group (SFEG) is a nonprofit organization dedicated to the enhancement of salmon resources through education, restoration and public involvement. Established in 1990 as one of 14 Regional Fisheries Enhancement Groups in Washington State, SFEG is part of a coordinated effort to educate and involve the public in salmon enhancement activities across the state at the community level. SFEG works cooperatively with local landowners to identify restoration opportunities on their property and find the funding to implement them. SFEG's region is large including the Skagit River and Samish Bay watersheds as well as the watersheds of the San Juan Islands and northern Whidbey Island. SFEG has a challenging role in the statewide recovery of salmon since the Skagit watershed alone is the largest Puget Sound drainage; covering over 3,000 square miles and contributing over one-third of the freshwater to Puget Sound. While development and timber activities have impacted the health of the Skagit watershed, its overall salmon habitat conditions are excellent relative to other more urbanized Puget Sound watersheds. Therefore, the Skagit watershed continues to provide significant spawning and rearing habitat for all five species of Pacific salmon. Historically, the Skagit watershed produced 60-70% of the Puget Sound chinook. Currently, approximately 50% of the production of Puget Sound chinook salmon depends on the Skagit watershed.

This year SFEG implemented restoration projects at 16 sites, managed 5 monitoring programs, developed 10 new projects for future years, and implemented a wide variety of educational programs. Major partnerships with the USDA's Wetlands Reserve Program, Seattle City Light, National Fish and Wildlife Foundation, Salmon Recovery Funding Board, US Forest Service, City of Mount Vernon, Skagit County, Ducks Unlimited, and The Nature Conservancy greatly contributed to our success with projects this past year. Many other smaller, but just as critical partnerships with landowners, community members, businesses, tribes, foundations, state agencies and federal agencies added to our accomplishments as well.

Community members contributed 5,761 hours valued at over \$72,000 to salmon enhancement this year by planting native trees, monitoring restoration sites, designing new restoration projects, counting returning salmon, distributing salmon carcasses, educating the community, and much more. Educational programs were delivered to over 1,771 students and adults to build awareness for salmon and their habitat. There were several new developments with the Skagit Fisheries Enhancement Group this year including hiring a new Restoration Crew Supervisor, expanding our Board of Directors from 8 to 12 members, receiving new foundation support and also working with a new WDFW Watershed Steward. Each of these new developments has posed a new challenge but is also helping to increase our capacity to restore habitat and educate our community into the future.

Budget Summary

INCOME

Public Funds	\$ 324,589
Private Funds	\$ 126,019
Total Cash Income	\$ 450,608
In-Kind Donations	\$ 117,371
Total	\$ 567,979

EXPENSES

Projects & Programs	\$ 351,065
Administration (15%)	\$ 61,527
Total	\$ 412,592

Summary of Accomplishments

Outreach:	Community education	1,771 individuals
	Volunteer involvement	5,761 hours
Habitat Enhancement:	Riparian revegetation	10,230 feet
	Riparian maintenance	203 acres
	Instream channel improvement	1,200 feet
	Estuary restoration	27 acres
	Nutrient enhancement	16,024 carcasses

Salmon Recovery Partners 2002-2003

ALEA Volunteer Cooperative Grants Danny Beatty Boy Scouts of America Blau Oysters Cascade Job Corps Cenex Chateau St Michelle Winery City Bakery City of Concrete City of Mount Vernon City of Sedro Woolley CREP Crown Pacific, Ltd. Ducks Unlimited Ferguson Foundation Fidalgo Fly Fishers Fidalgo Bay Roasting Company FishAmerica Gretchen's Kitchen Store Holiday Market Il Granario Insta-Signs Island Adventures Island Outfitters Island County Ivars Seafood Restaurant Krispy Kreme The Lincoln Theater Lee Mann, photographer Marblegate Community Association Merritt Apples Mount Baker Ski Area	Mount Baker National Forest The Mountaineers Foundation National Fish and Wildlife Foundation National Wildlife Federation Natural Resource Conservation Service National Park Service NOAA Restoration Center North Cascades Institute North Cascade Networks Northwest Women Fly Fishers People for Puget Sound People for Salmon/AWISH Per Dona Salon Printwise, Inc. Puget Sound Anglers-Fidalgo Chapter Puget Sound Energy Restore America's Estuaries Safeway Samish Indian Nation San Juan Conservation District Sauk Mountain View Golf Course SeaBear Smoked Fish SeaBolt's Smokehouse Seattle City Light Seattle IMAX Scott's Bookstore Sigi's Steve Seymour, sculptor Skagit Anglers Skagit Land Trust Skagit Conservation District	Skagit Conservation Education Alliance Skagit County Skagit River Brewing Company Skagit River Stewards Skagit Stream Team Skagit System Cooperative Skagit Valley College Skagit Valley Food Co-op Skagit Watershed Council Summit GIS Swil Kanim Taylor Shellfish The Nature Conservancy Thrifty-Food Pavilion Trillium Corporation Tulip Festival Association US Army Corps of Engineers US Fish and Wildlife Service US Forest Service Wal*Mart Washington Conservation Corps WA Salmon Recovery Funding Board WA State Department of Ecology WA State Department of Fish and Wildlife WA State General Administrative Services Wetlands Reserve Program The Whale Museum Whatcom Land Trust Whidbey Island Conservation District Wildcat Steelhead Club Wizards of Ooze
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Habitat Enhancement Projects

East Fork Nookachamps Creek-Instream Restoration: This project illustrates a unique SFEG partnership with local landowners and federal agencies. The USDA's Wetlands Reserve Program worked with a local dairy farmer to secure a permanent conservation easement on 33 acres of wetland property on either side of the East Fork of Nookachamps Creek. The protected stream reach is an important migration route for many salmonid species including chinook, chum, coho, cutthroat and steelhead. SFEG worked with the Wetlands Reserve Program to design a restoration project that would re-establish floodplain processes and maximize rearing habitat for juvenile salmon. Historic photos indicate that the stream reach was channelized and riparian vegetation removed about 50 years ago significantly reducing the length of the channel and decreasing habitat complexity necessary for salmon survival. A SRFB grant funded the 1,200 foot stream channel enhancement through the installation of six large woody debris structures and removal of wetland fill in order to promote natural channel meandering, develop pool-riffle habitat, and enhance large woody debris recruitment. Over 2,500 native trees and shrubs were planted by volunteers and paid restoration staff this past year. These riparian restoration efforts will continue in the coming year with maintenance work to ensure high survival of newly planted vegetation. SFEG will be monitoring the site for changes in the channel structure, vegetation survival and fish use.

East Fork Nookachamps Creek-Riparian Restoration: Riparian restoration occurred at three sites associated with the East Fork of Nookachamps Creek all on Wetlands Reserve Program conservation easements in cooperation with Ducks Unlimited. Work on two easements restored 3,840 feet of the East Fork by planting thousands of native plants. An additional one half mile of Turner Creek, a tributary to East Fork Nookachamps was also restored through establishment of native riparian plants. These sites are all privately owned with permanent conservation easements on them to maintain their wetland habitat values. SFEG has entered in a contract with the USDA's Wetland Reserve Program and will continue to maintain these riparian plantings to ensure their survival.

Nutrient Enhancement: Since 1997, SFEG volunteers have worked in partnership with the Wildcat Steelhead Club to add nutrients to the Skagit watershed by distributing salmon carcasses from Washington Department of Fish and Wildlife's Marblemount Hatchery. During 2002 volunteers placed 16,024 carcasses into tributaries of the Cascade River. Carcasses are essential to returning marine derived nutrients to the food web for wild salmonid fry and many other flora and fauna species. As fewer salmon return naturally to spawn, it has become essential to find other ways of returning these essential marine derived nutrients to the ecosystem. To date volunteers in the Skagit watershed have distributed over 46,000 carcasses.

Native Plant Nursery: SFEG volunteers watered, weeded, maintained, transplanted and potted native plants at SFEG's nursery to produce a higher quality plant in greater quantities than what is available at local nurseries. The native plant growing operation enables SFEG to

use plants at any time during the growing season rather than the limited time plants are available at nurseries. SFEG's nursery can hold roughly 4,500 plants in four raised beds. This past year over 2,400 potted plants were planted at over ten restoration sites. Over 2,700 new plants of 27 different species were brought into the nursery and potted by volunteers for future planting. A plant labeling method was instituted which allows nursery volunteers to know when the plants were potted and when they should be transplanted out to restoration sites by the color of the label. About one third of the plants are ready to be planted this fall.

Deepwater Slough: The Deepwater Slough Project is a 204 acre estuary restoration project implemented in 1999 located on Washington Department of Fish and Wildlife land at the mouth of the South Fork of the Skagit River. The project removed dikes to restore river and tidal influence to the project area creating critical juvenile habitat for threatened Puget Sound chinook salmon. The Skagit System Cooperative is the lead on this project. SFEG's role in this project is to treat invasive vegetation species and while also planting native species. SFEG's restoration crew removed blackberries, scotch broom, Japanese knotweed from upland dike areas. Reed canary grass was removed from marsh areas and replanted with the native estuary shrub sweetgale. Total area treated was approximately 15 acres.

Skagit Estuary Spartina Removal: SFEG worked with the Skagit County Noxious Weed Control Board to treat Spartina in Skagit Bay through chemical and mechanical means. Approximately 45 acres was treated reducing the amount of Spartina to approximately 23 acres this past year. The Spartina removal effort has been quite effective in Skagit County. Since 1994, hundreds of acres of Spartina have been successfully eradicated throughout Skagit County's tidal waters. Partnering with local organizations and tribes to host an annual Volunteer Dig Day has helped increase community awareness of this invasive weed.

French Creek: Approximately 1,500 feet of French Creek was restored by planting native vegetation on 75 acres. The restoration occurred on two properties with permanent conservation easements through the Wetland Reserve Program in partnership with Ducks Unlimited. SFEG has entered in a contract with the USDA's Wetland Reserve Program and will continue to maintain these riparian plantings to ensure their survival.

Riparian Maintenance: A large amount of time and energy was devoted to establishing native plants at sites where planting had occurred. This maintenance work is absolutely essential at many of the sites where we work. Native plants need to be protected and invasive species need to be controlled in order to ensure riparian restoration efforts succeed. This year we performed maintenance work on over 203 acres including mowing, weedwacking, spraying herbicide and protecting trees with tree wraps.

SFEG's restoration crew and volunteers completed a variety of other smaller riparian restoration projects throughout the Skagit and Samish watersheds this past year. Nine volunteer work parties were held at 6 different sites that involved over 120 people. The restoration crew also worked at several sites in conjunction with the City of Mount Vernon's restoration efforts.

Education and Outreach

Stormwater Education: A contract with the City of Mount Vernon funded SFEG to teach students about the connection between stormwater and salmon habitat. The program consists of classroom visits as well as service learning projects. Students installed Grate Mate filters in stormdrains to help stop pollutants from entering our salmon streams. Over 150 students were involved in stenciling over 50 stormdrains with the message "Dump no waste, Drains to streams" to help teach their community about pollution.

Student Service-Learning: Throughout the year SFEG carried out service learning projects for several school groups in Mount Vernon, Sedro Woolley, and Burlington. These projects differ from other group volunteer projects in that they typically last longer than one day, and they include more in-depth education and exploration in conjunction with volunteer work by the students. In addition to the stormwater programs, SFEG worked with several groups from State Street High School's SKY program (Service, Knowledge, Youth), Best Self summer classes, and Mount Vernon alternative high school classes. These students learned about the salmon life cycle, salmon identification, native plants and riparian restoration, different methods of water quality monitoring, and ways to convert what they've learned into beneficial actions in their everyday lives.

Skagit River Stewards: SFEG continued to partner with the US Forest Service, North Cascades National Park and North Cascades Institute to train volunteers through the Skagit River Stewards program. Skagit River Steward volunteers are trained to collect physical and biological data in streams in order to track watershed health. Macroinvertebrates collected through biologically sampling are excellent indicators of stream health. National Park Service staff is working on completing an index of biological integrity specific to the Skagit Watershed which will greatly assist us in determining and monitoring the health of salmon streams in our watershed.

Wild Salmon Education Trunk: SFEG continued to make excellent use of the resources included in the "Wild Salmon Education Trunk" created by Washington Department of Fish and Wildlife. SFEG utilized a Volunteer Cooperative grant to duplicate popular materials and activities for better distribution. Grant funds were also used to develop a new Salmon Trunk specifically for the San Juan Islands.

Skagit Watershed Council: As the Lead Entity for salmon recovery in the Skagit watershed the Council developed a list of prioritized projects to submit to the Salmon Recovery Funding (SRF) Board. SFEG played a significant role in the development of this project list as a project sponsor, project reviewer and project prioritizer. A list of 18 projects was submitted to the SRF Board in November 2002. The top 6 projects were funded for a total of nearly \$2.1 million. SFEG also is playing a major role on the newly developed Monitoring Committee as the Council strives to develop implementation and effectiveness monitoring protocols for salmon enhancement projects in our region.

San Juan Islands and Whidbey Island Outreach: SFEG has been networking with the Island County Lead Entity, as well as the San Juan Islands Lead Entity to learn more about the salmon habitat issues facing these communities and to determine how better to assist individuals in these island communities. We attended several educational events and fairs in the islands this past year and also developed a new Salmon Trunk specifically for the San Juan Islands. SFEG began assisting the San Juan Conservation District with their Watershed Masters program and assisted several property owners to develop salmon enhancement projects.

Community Education: Programs were delivered to 13 service clubs, fishing clubs, teachers' groups, and general public groups. SFEG also assisted with Skagit Stream Team, National Water Quality Monitoring Day and Earth Day events. By bringing presentations and activities directly to those who fish, teach, and actively support community programs SFEG has an opportunity not only to generate awareness and energize new volunteers, but it can also be helpful in finding new program funding sources. Other education projects included working with the North Cascades Institute to implement the **Skagit Watershed Education Project**. This project educates local elementary school students about salmon ecology and restoration through hands-on activities. SFEG helped both the Skagit Conservation District and the San Juan Conservation District with their **Watershed Masters** to educate adult volunteers about salmon restoration and watersheds. Volunteers in these programs each gave 40 hours of volunteer service related to watersheds in return for this training. Funding from the National Fish and Wildlife Foundation was critical to expanding our education efforts to the island communities as well as working with all the Lead Entities in our region. Funding from Skagit County also helped further our education and outreach efforts.

Monitoring, Assessment and Research

Monitoring: Volunteers assisted SFEG's monitoring coordinator at over 30 project sites to perform spawner surveys, monitor vegetation, conduct instream habitat monitoring, collect macroinvertebrates and take photos at reference points. Well over 50 volunteers were trained at workshops to utilize protocols for the five different monitoring programs. SFEG has been consistently impressed with the data collected by these volunteers and their dedication. The fact that volunteers return to SFEG year after year is a good indicator that they have had a positive and worthwhile experience. Returning volunteers are even more valuable to SFEG as they are more experienced and can help train new volunteers. Data collected is entered into databases and shared with other agencies and organizations. A report was compiled containing an analysis of the last year's data collected at restoration sites. SFEG is actively participating with the Monitoring Committee for the Skagit Watershed Council to share monitoring protocols as we try to establish a standardized method for collecting salmon restoration project data within our region. Funding from the National Fish and Wildlife Foundation was essential this past year for coordination of volunteers to perform monitoring as well as participate on the Lead Entity's Monitoring Committee.

Project Design and Development: Final designs and permitting were completed for four projects. Three are fish passage projects (Shoeshell Drive Culvert, Marblegate Slough Bridge, and Lake Creek) and the fourth is for installing large log jams on Finney Creek. SFEG hopes to implement all four of these projects in the coming year. Many new funding requests were made. Some new projects were developed through new partnerships with Seattle City Light (for Anderson Creek) and Whatcom Land Trust (for Ennis Creek). As more detailed information is required up front to put together funding requests, these partnerships become more and more critical to our success. This past year National Fish and Wildlife Foundation funds were critical for allowing our project manager time to develop and design projects for future funding.

McElroy Slough Estuary Restoration: SFEG has been working with the community to restore saltwater functions to this Samish Bay slough through the installation of a self-regulating tide gate since 1997. Although SRFB has funded the project, a final design has been completed and all permits have been secured, construction plans were put on hold in 2002 by Skagit County while they undergo additional studies. SFEG continued to conduct pre-project monitoring by tracking salinity content and elevation of the surrounding groundwater.

Board of Directors:

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Dick Knight, *Vice President*, Retired Environmental Engineer
Bruce Freet, *Secretary*, Environmental Mediator
Deene Almvig, *Treasurer*, Retired Educator
Bruce Johnson, Wetlands Specialist
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Dan Ballard, Retired Insurance Agency Owner
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Staff:

Alison Studley, *Executive Director*
Lucy Applegate, *Outreach Coordinator*
Perry Welch, *Project Manager*
Kevik Rensink, *Monitoring Coordinator*

Restoration Crew:

Dan Jacobson, *Supervisor*
Bob Keller
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Geoff Martin
Erin Mader, *Washington Conservation Corps*

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