



Regional Fisheries Enhancement Program



Washington
Department of
**FISH and
WILDLIFE**

Annual Report for July 1, 2011 - June 30, 2012



*Dedicated to
Community-Based
Salmon Enhancement
in Washington State*

Regional Fisheries Enhancement Program

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Executive Summary

Dedicated To Community-Based Salmon Enhancement throughout Washington State

The Regional Fisheries Enhancement Groups (RFEGs) are a statewide network of non-profit salmon enhancement organizations. Created by the Washington State Legislature in 1990, the RFEG Program involves local communities, citizen volunteers and landowners in the state's salmon recovery efforts. The long term vision of the RFEG program is that Washington State communities actively care for and become stewards of abundant salmon populations for future generations.

The 14 RFEGs share the unique role of involving local communities in salmon enhancement activities. Each group is a separate, local, non-profit organization with their own board of directors and supported by their members.

The RFEGs share the goal of enhancing salmon and steelhead populations and habitat through leveraging contributions and support from local communities. The RFEGs create dynamic partnerships with local, state and federal agencies, Native American tribes, local businesses, citizen groups and landowners. RFEGs help lead their communities in successful enhancement, restoration, assessment, education and monitoring projects.

Donations and in-kind contributions from community members and businesses are essential to the success of each RFEG. Individual RFEGs obtain many grants from

governmental and private entities. In recent years the RFEG Program has successfully worked with U.S. Representatives and Senators to secure funding from the federal government.

During the fiscal year, the RFEGs collectively completed:

- **192 projects** ranging from education and outreach to monitoring and, of course, on the ground salmon enhancement projects.
- RFEG volunteers donated over **127,245 hours** to these salmon enhancement efforts.
- Half of the RFEGs participated in fish production projects, **releasing 2,510,100 fish** into local watersheds.
- **31 fish passage** improvement projects **opened 34 miles of habitat** for migrating salmon.
- **39 miles of habitat** was enhanced and restored for salmonids and
- **57,676 salmon carcasses** were returned to streams to add nutrients to local watersheds for juvenile salmon, bears, eagles and over 130 other species of wildlife.
- **187.2 FTEs supported:** 52.7 RFEG FTEs, 22 Washington Conservation Corp FTEs and an additional 112 professional and construction FTEs.

Since 1995, these accomplishments add up to:

- 3,401 total salmon projects
- 1,460,111 volunteer hours
- 71.8 million salmon released into Washington waters
- 773 fish passage problems fixed
- 881 miles of fish habitat opened
- 575 additional miles of habitat restored
- 1,020,807 fish carcasses placed back in streams for nutrient enhancement
- \$167,703,892 in additional leveraged funding for salmon restoration efforts

The RFEG program makes a special contribution to Washington's salmon recovery efforts by:

- Leveraging local and private money;
- Promoting stewardship through volunteer involvement;
- Working cooperatively with diverse interest groups; and,
- Building on each year's successes.

Washington Department of Fish and Wildlife's Mission for the Regional Fisheries Enhancement Program

The Washington Department of Fish and Wildlife (WDFW) provides financial and technical resources to the Regional Fisheries Enhancement Groups to engage citizens and their communities in salmon recovery.

The Regional Fisheries Enhancement Groups provide grass roots salmon recovery efforts. These efforts include conducting outreach and education, maintaining relationships with citizens and landowners, and building local support for salmon recovery. The groups are also invaluable project sponsors, working with landowners, volunteers, and local contractors to complete on-the-ground restoration and enhancement projects. Much of the progress and success in salmon recovery is due to local citizen-driven actions such as those conducted by the Regional Fisheries Enhancement Groups.

Funding for the RFEG Program comes from several sources, including a percentage of salmon license revenue (both commercial and recreational) and egg and

carcass sales from state-funded hatcheries. RFEG funds administered by WDFW are equally apportioned to the groups. In turn, the individual RFEGs utilize state and federal funding to attract tremendous local support for their work often recruiting upwards of seventeen times their base funding in additional grants. WDFW also manages annual federal contracts granted to the RFEG Program.

In addition to its fiduciary (contracting and accounting services) responsibility to the RFEG Program, WDFW reviews all RFEG project proposals to ensure compatibility with existing laws, WDFW policies, comanagement and other salmon recovery efforts conducted within a specific watershed.



Scientific Monitoring



In addition, Washington's RFEGs regularly implement scientific monitoring programs to assess salmon populations, salmon habitat, and salmon habitat restoration projects.

RFEGs use scientific protocols to measure project effectiveness, quantify salmon populations, assess long-term impacts of projects and analyze cost effectiveness of projects and progress.

Scientific monitoring activities currently performed by RFEGs include:

- Spawning ground surveys
- Habitat assessments
- Adult and juvenile fish counts
- Macro invertebrate surveys
- Nutrient enhancement monitoring
- Pre- and post project vegetation monitoring for riparian planting projects
- Water quality data collection and analysis
- Effectiveness of large woody debris placement and in-stream projects
- Nearshore habitat monitoring



RFEGs utilize staff, interns, volunteers and contractors, in collaboration with WDFW and other agencies, to implement scientific monitoring protocols, projects and programs.

The monitoring activities of each RFEG are presented within their respective RFEG section in this report.



Tables and Graphs

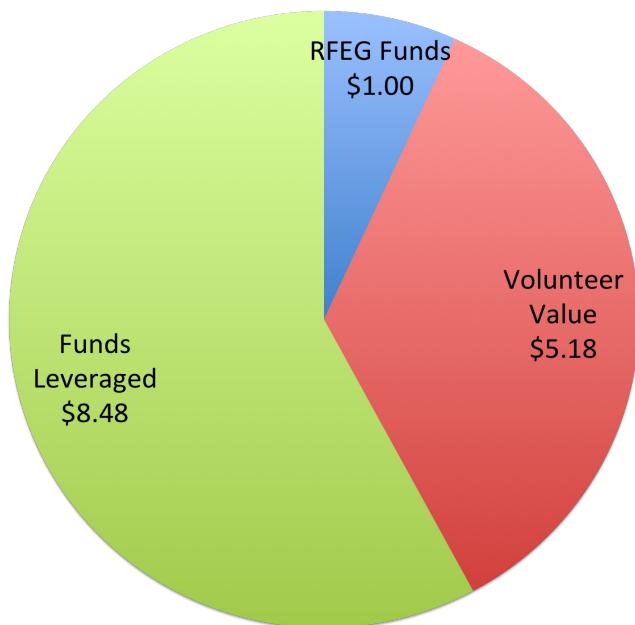
Regional Fisheries Enhancement Group Program Expenditures: July 1, 2011 to June 30, 2012

| Group | RFEG Funds | Volunteer Hours | Volunteer Dollars* | Funds Leveraged | Total Spent |
|----------------------------|--------------------|-----------------|--------------------|---------------------|---------------------|
| Nooksack SEG | \$112,110 | 53,170 | \$1,116,570 | \$1,484,471 | \$2,713,151 |
| Skagit FEG | \$126,742 | 7,893 | \$165,748 | \$1,246,736 | \$1,539,226 |
| Sound Salmon Solutions | \$212,894 | 10,612 | \$228,448 | \$679,532 | \$1,120,874 |
| Mid-Sound FEG | \$135,798 | 1,120 | \$23,520 | \$171,688 | \$331,006 |
| South Puget Sound SEG | \$147,167 | 1,000 | \$21,000 | \$1,062,377 | \$1,230,544 |
| Hood Canal SEG | \$104,905 | 7,111 | \$149,321 | \$1,415,297 | \$1,669,342 |
| North Olympic SC | \$121,698 | 3,722 | \$78,189 | \$521,312 | \$721,199 |
| Pacific Coast SC | \$147,855 | 3,137 | \$65,877 | \$230,387 | \$444,119 |
| Chehalis Basin FTF | \$95,191 | 7,297 | \$153,237 | \$399,994 | \$648,422 |
| Willapa Bay RFEG | \$5,343 | 2,064 | \$43,344 | \$0 | \$48,687 |
| Lower Columbia FEG | \$83,604 | 26,478 | \$556,038 | \$2,312,486 | \$2,952,128 |
| Mid-Columbia FEG | \$180,217 | 1,156 | \$24,276 | \$1,019,264 | \$1,223,757 |
| Tri-State Steelheaders SEG | \$150,570 | 1,979 | \$41,549 | \$891,292 | \$1,083,410 |
| Cascade Columbia FEG | \$120,166 | 507 | \$10,647 | \$85,743 | \$216,556 |
| <i>Total</i> | <i>\$1,744,259</i> | <i>127,245</i> | <i>\$2,677,762</i> | <i>\$11,520,579</i> | <i>\$15,942,421</i> |

* Volunteer Dollars are based on an average of \$21 for each volunteer hour donated
http://www.independentsector.org/volunteer_time

Regional Fisheries Enhancement Group Expenditures

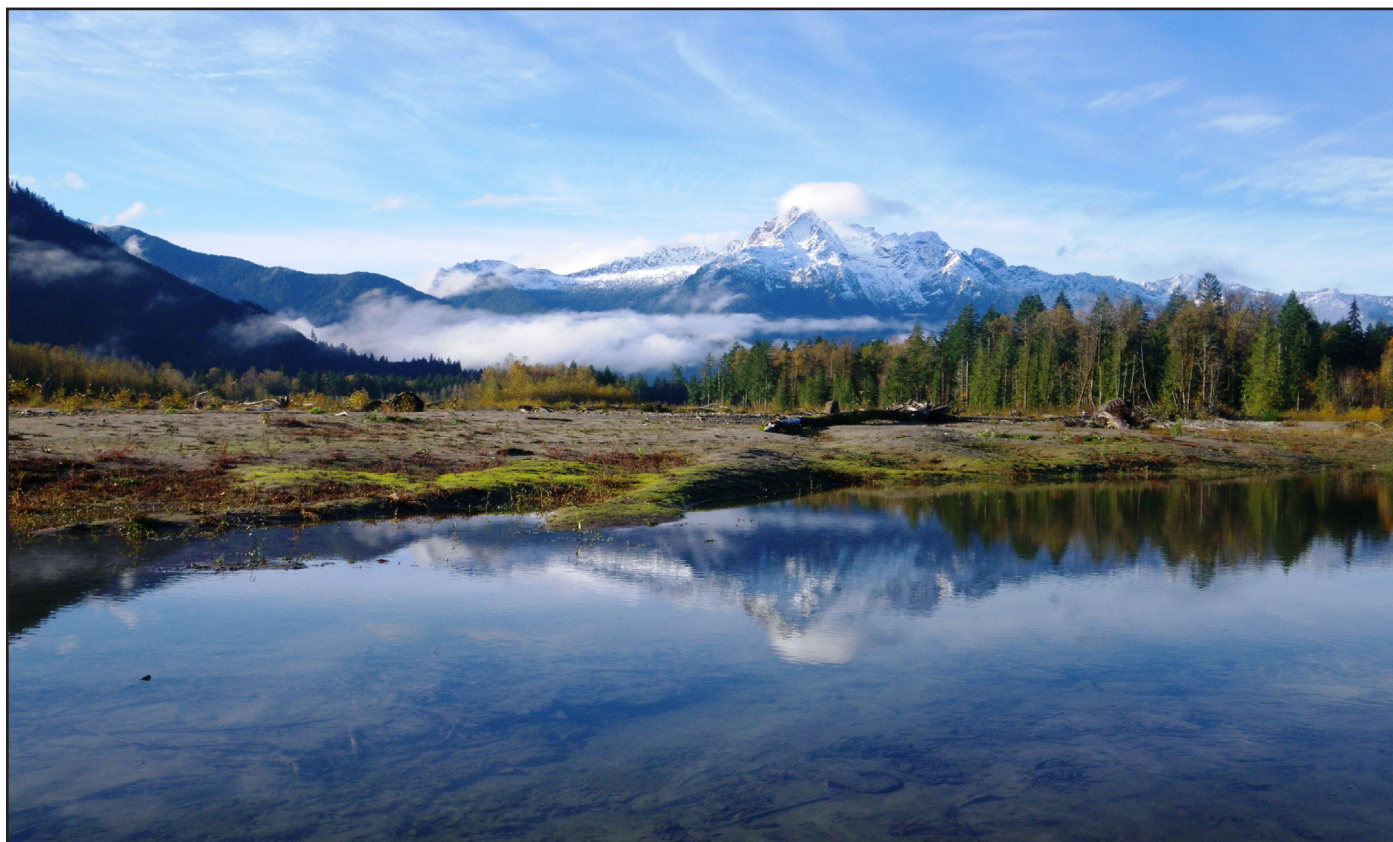
by dollar value - for every \$1 of RFEG funds,
 the RFEGs leverage \$8.48 in other funds and \$5.18 in volunteer value.



USFS road removal at the Greenwater River

Regional Fisheries Enhancement Program Accomplishments - July 1, 2011 - June 30, 2012

| Group | Fish Released | Passage Projects | River Opened (Miles) | Habitat Restored (Miles) | Carcasses Distributed | Students Served | Projects Completed |
|----------------------------|------------------|------------------|----------------------|--------------------------|-----------------------|-----------------|--------------------|
| Nooksack SEG | 0 | 4 | 3.30 | 1.3 | | 1,244 | 16 |
| Skagit FEG | 0 | 0 | 0 | 5 | 0 | 657 | 32 |
| Sound Salmon Solutions | 0 | 1 | 0 | 2 | 390 | 3,085 | 12 |
| Mid-Sound FEG | 0 | 2 | 2.50 | 1 | 0 | | 5 |
| South Puget Sound SEG | 0 | 2 | 4.50 | 5.3 | 0 | 4,000 | 24 |
| Hood Canal SEG | 417,900 | 8 | 2.47 | 10.5 | | 400 | 29 |
| North Olympic SC | 0 | 0 | 0 | 0.7 | 0 | 2,524 | 2 |
| Pacific Coast SC | 3,800 | 3 | 0.50 | 2.5 | 10.97 | | 13 |
| Chehalis Basin FTF | 1,328,200 | 1 | 12.00 | | 1,058 | 16 | 1 |
| Willapa Bay RFEG | 760,000 | | | | | | 4 |
| Lower Columbia FEG | 0 | 0 | 0 | 5 | 45,000 | | 15 |
| Mid-Columbia FEG | 0 | 6 | 8.00 | 6 | 0 | 1,580 | 33 |
| Tri-State Steelheaders SEG | 200 | 3 | 0.10 | 0.8 | 100 | 40 | 18 |
| Cascade Columbia FEG | 0 | 1 | 0.25 | 0.3 | 150 | NR | 4 |
| <i>Total</i> | <i>2,510,100</i> | <i>31</i> | <i>33.6</i> | <i>39.9</i> | <i>57,676</i> | <i>13,546</i> | <i>192</i> |



Sauk Floodplane

Regional Descriptions and Boundary Map

Region 1 - Nooksack Salmon Enhancement Association

Region 1 includes most of Watershed Resource Inventory Area (WRIA) 1 – the major watershed is the Nooksack River. This region includes nearshore habitat and other watersheds located from the Canada-U.S. border south to Oyster Creek in Samish Bay and also watersheds flowing from Whatcom County to the Fraser River.

Region 2 - Skagit Fisheries Enhancement Group

Region 2 includes WRIAs 2, 3, and 4, and parts of 1 and 6 – the major watersheds are the Skagit and Samish Rivers. This region includes nearshore habitat and other watersheds located from Samish Bay, south of Oyster Creek, south to and including Penn Cove on Whidbey Island and includes the San Juan Islands.

Region 3 - Sound Salmon Solutions (formerly Stilly-Snohomish FETF)

Region 3 includes WRIAs 5 and 7 and parts of 6 and 8 – the major watersheds are the Stillaguamish and Snohomish Rivers. This region includes nearshore habitat and other watersheds located south of Penn Cove on Whidbey Island, including Camano Island and the mainland south to the Edmonds ferry docks.

Region 4 - Mid-Sound Fisheries Enhancement Group

Region 4 includes WRIAs 8 and 9 and part of 15 – the major watersheds are those entering Lake Washington and the Green/Duwamish River. This region includes nearshore habitat and other watersheds from the Edmonds ferry dock south to Brown's Point, across to the north side of Gig Harbor, and north around Foulweather Bluff down to the Hood Canal Bridge.

Region 5 - South Puget Sound Salmon Enhancement Group

Region 5 includes WRIAs 10, 11, 12, 13, 14, and parts of 15 – the major watersheds are the Puyallup, Nisqually, and Deschutes Rivers. This region includes nearshore habitat and other watersheds draining into Puget Sound south of a line between Brown's Point and the north side of the entrance to Gig Harbor.

Region 6 - Hood Canal Salmon Enhancement Group

Region 6 includes WRIA 16 and parts of 14, 15, and 17 – major watersheds include the Skokomish, Hamma Hamma, Duckabush, Dosewallips, and Quilcene Rivers. This region includes nearshore habitat and other watersheds located in Hood Canal south of the Hood Canal Bridge.

Region 7 - North Olympic Salmon Coalition

Region 7 includes WRIAs 18 and 19 and part of 17 – major watersheds include the Dungeness, Elwha, Lyre, Pysht, Clallam, and Hoko Rivers. This region includes nearshore habitat and other watersheds located north and west of the Hood Canal Bridge to Cape Flattery.

Region 8 - Pacific Coast Salmon Coalition

Region 8 includes WRIAs 20 and 21 – the major watersheds include the Sooes, Ozette, Quillayute, Hoh, Queets, and Quinault Rivers. This region includes nearshore habitat and other watersheds entering directly into the Pacific Ocean between Cape Flattery and the north side of Grays Harbor.

Region 9 - Chehalis Basin Fisheries Task Force

Region 9 includes WRIAs 22 and 23 – major watersheds include the Humptulips, Hoquiam, Wishkah, Johns, Wynoochee, Satsop, Skookumchuck, Newaukum, Black and Chehalis Rivers. This region includes nearshore habitat within and other watersheds flowing into Grays Harbor.

Region 10 - Willapa Bay Regional Fisheries Enhancement Group

Region 10 includes most of WRIA 24 – the major watersheds include the North, Willapa, Palix, Nemah, Bear, Long Island, and Naselle Rivers. This region includes nearshore habitat within and other watersheds flowing into Willapa Bay.

Region 11 - Lower Columbia Fish Enhancement Group

Region 11 includes WRIsAs 25, 26, 27, and 28 and parts of 24 and 29 – major watersheds include the Chinook, Grays, Elochoman, Cowlitz, Kalama, Lewis, and Washougal Rivers. This region includes Columbia River habitat and other watersheds entering the Washington side of the Columbia River below Bonneville Dam.

Region 12 - Mid-Columbia Regional Fisheries Enhancement Group

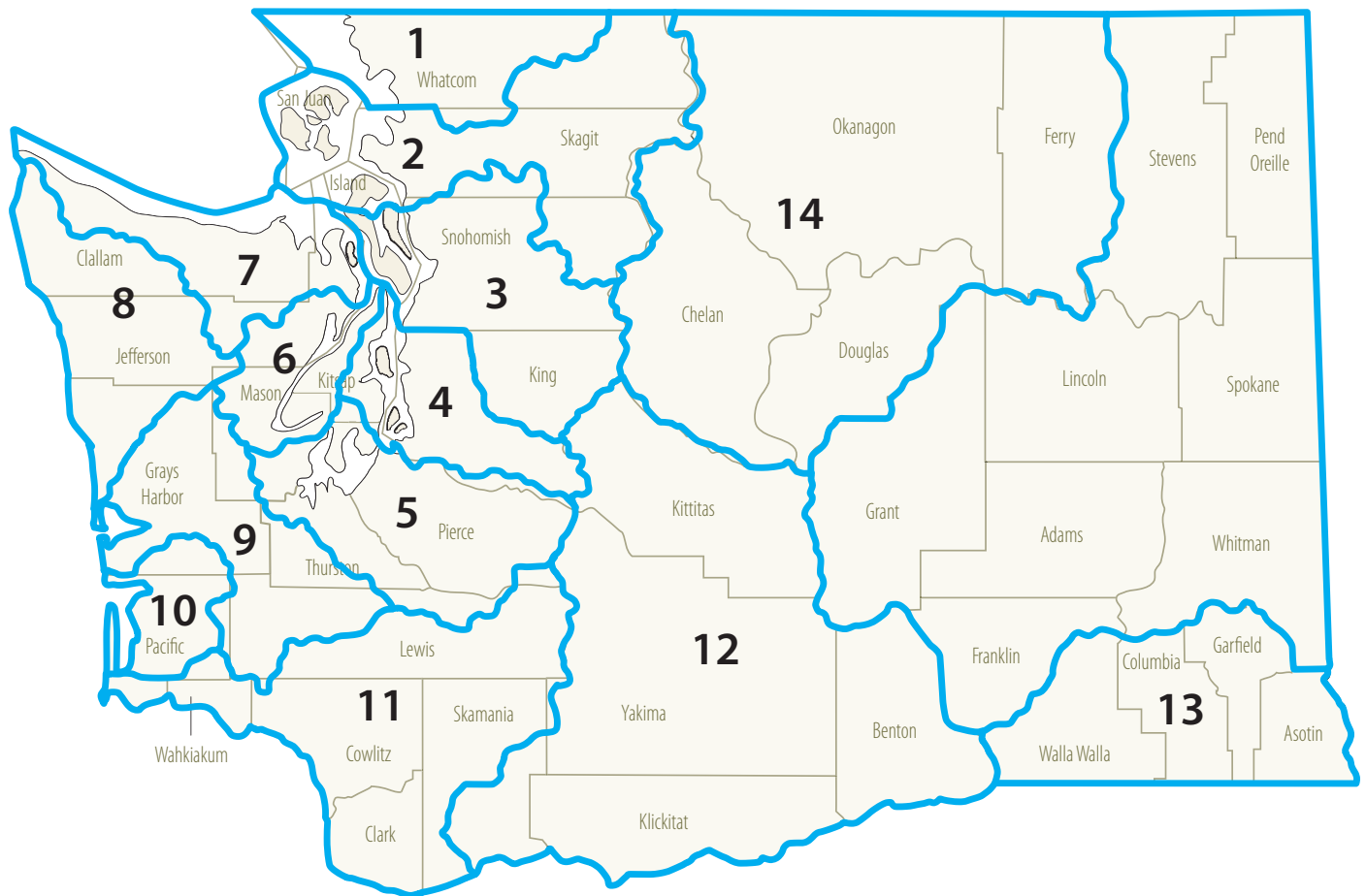
Region 12 includes WRIsAs 30, 31, 37, 38, 39, and 40, and most of 29 – major watersheds include the Little White Salmon, White Salmon, Wind, Yakima, and Klickitat Rivers. This region includes Columbia River habitat and other watersheds entering the Columbia River from the north and west above Bonneville Dam up to Rock Island Dam.

Region 13 - Tri-State Steelheaders Salmon Enhancement Group

Region 13 includes WRIsAs 32, 33, and 35, and parts of 34 and 36 – major watersheds include the Snake and Walla Walla Rivers. This region includes Columbia River habitat and other watersheds entering the Columbia River from the east between McNary Dam and the Interstate 182 Bridge at Richland.

Region 14 - Cascade Columbia Fisheries Enhancement Group

Region 14 includes WRIsAs 44, 45, 46, 47, 48, 49, 50, 51, and 52 – major watersheds include the Wenatchee, Entiat, Methow, Okanogan, and San Poil Rivers. This region includes Columbia River habitat and other watersheds entering the Columbia River above Rock Island Dam up to and including the San Poil watershed.



Contact List

Nooksack Salmon Enhancement Association

2445 East Bakerview Road
Bellingham WA 98226-7694
Phone: (360) 715-0283
Fax: (360) 715-0282
E-mail: info@n_sea.org
Website: www.n-sea.org

Skagit Fisheries Enhancement Group

PO Box 2497, 1202 S. 2nd St, Suite C
Mt. Vernon WA 98273
Phone: (360) 336-0172
Fax: (360) 336-0701
E-mail: sfeg@skagitfisheries.org
Website: www.skagitfisheries.org

Sound Salmon Solutions

(Formerly Stilly-Snohomish Fish Enhancement Task Force)
1911 Vernon Road
Lake Stevens WA 98258
Phone: (425) 252-6686
Fax (call first) (206) 353-8808
E-mail: info@soundsalmonsolutions.org
Website: www.soundsalmonsolutions.org

Mid-Sound Fisheries Enhancement Group

7400 Sand Point Way NE, Suite 202 N
Seattle WA 98115
Phone: (206) 529-9467
Fax: (206) 529-9468
Website: www.midsoundfisheries.org

South Puget Sound Salmon Enhancement Group

6700 Martin Way East, Suite 112
Olympia WA 98516
Phone: (360) 412-0808
Fax: (360) 412-0809
E-mail: spsseg@spsseg.org
Website: www.spsseg.org

Hood Canal Salmon Enhancement Group

600 NE Roessel Rd, PO Box 2169
Belfair WA 98528
Phone: (360) 275-3575
Fax: (360) 275-0648
E-mail: hcseg@hcseg.org
Website: www.hcseg.org

North Olympic Salmon Coalition

205 B West Patison Street
Port Hadlock WA 98339
Phone: (360) 379-8051
Fax: (360) 379-3558
E-mail: rbenjamin@nosc.org
Website: www.nosc.org

Pacific Coast Salmon Coalition

PO Box 2527
Forks WA 98331
Phone: (360) 374-8873
E-mail: pacsac@olypen.com
Website: www.cohosalmon.com

Chehalis Basin Fisheries Task Force

115 S Wooding Street
Aberdeen WA 98520
Phone: (360) 533-1766
Fax: (360) 533-1767
E-mail: cbftf@reachone.com
Website: <http://www.cbftf.com>

Willapa Bay Regional Fisheries Enhancement Group

PO Box 46
South Bend WA 98586-0046
Phone: (360) 267-5244
Fax: (360) 267-6023
E-mail: lakebob@comcast.net
Website: www.wbrfeg.org

Lower Columbia Fisheries Enhancement Group

12404 SE Evergreen Highway
Vancouver WA 98683
Phone: (360) 882-6671
E-mail: info@lcfeg.org
website: www.lcfeg.org

Mid-Columbia Regional Fisheries Enhancement Group

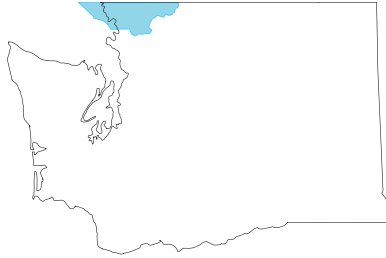
PO Box 1271
White Salmon WA 98672
Phone: (509) 281-1322
E-mail: fish@midcolumbiarfeg.com
Website: www.midcolumbiarfeg.com

Tri-State Steelheaders Salmon Enhancement Group

Post Office Box 1375 / 216 N Roosevelt
Walla Walla WA 99362
Phone: (509) 529-3543
Fax: (509) 529-3543
E-mail: tssfish@tristatesteelheaders.com (Office)
Website: www.tristatesteelheaders.com

Cascade Columbia Fisheries Enhancement Group

(Formerly Upper Columbia Regional Fish Enhancement Group)
PO Box 3162 Wenatchee WA 98807
Phone: (509) 888-7268
E-mail: Jason@ccfeg.org
Website: www.ucrfeg.org



REGION 1: Nooksack Salmon Enhancement Association



CONTACT INFORMATION Nooksack Salmon Enhancement Association

2445 East Bakerview Road
Bellingham, WA 98226
Phone: (360) 715-0283
Fax: (360) 715-0282
E-mail: info@n-sea.org
Website: www.n-sea.org

Mission Statement

The Nooksack Salmon Enhancement Association is a community-based nonprofit organization dedicated to restoring sustainable wild salmon runs in Whatcom County.

Overview

Established in 1990, the Nooksack Salmon Enhancement Association (NSEA) works cooperatively with landowners, agencies, tribes, businesses, service organizations, students, schools, and community volunteers to increase the awareness of, support for, and involvement in salmon restoration and education. The NSEA Board of Directors meets monthly, using a Strategic Plan to implement projects and programs and address goals. NSEA's Board and staff manage operations and the fiduciary responsibilities of grants, contracts and an annual budget.

Project Highlights

Riparian Restoration: 6,950 feet of riparian habitat planted with 18,761 native trees and shrubs, as well as maintenance at 27 previously planted sites.

Volunteer Work Parties: Community volunteers helped crews and staff with 91 volunteer riparian restoration work parties in 2011.

In-stream habitat projects: 29 large woody debris structures were installed; improving 3.3 miles of in-stream habitat.

Fish passage projects: 4 fish passage barriers were removed; improving fish access to 3.3 miles of stream.

Education: 1,244 students in Whatcom County participated in NSEA education programs spending 16,701 hours becoming more aware of their environment through hands-on learning and were active participants in NSEA's restoration efforts. Additionally, NSEA coordinated a Washington Conservation Corps crew, trained 34 interns, and directed a stream restoration crew to implement projects year-round.

Community outreach: Community members contributed 13,818 hours to salmon enhancement activities in 2011 by planting native vegetation, monitoring water quality, counting

returning salmon, and supporting NSEA's capacity to operate as a vibrant nonprofit organization.

Fish enhancement: 16 salmon habitat enhancement projects.

Program Highlights

Volunteer Community Work Parties

Community members who participated in the Whatcom County Stream Stewardship Program and projects which includes NSEA's Community Volunteer Work Parties took action to improve the health of their local watersheds by engaging in hands-on salmon and stream recovery projects at streamside habitat restoration sites. Providing information regarding watershed health, riparian importance, and stream etiquette - coupled with hosting community work parties - helped create momentum behind stream stewardship. Strong stewardship for healthy streams encourages participation in riparian restoration and healthy water quality in these watersheds, ultimately creating a healthy community for people and salmon. This year 2,520 community members attended 91 Community Volunteer Work Parties.



Community members of all ages help in salmon habitat restoration projects

Monitoring

Under the direction of the WDFW, NSEA conducted its thirteenth year of spawning grounds surveys for fall Chinook, coho and chum salmon. With support from members of the community, NSEA was able to conduct surveys of our healthy Lake Whatcom kokanee population. These surveys took place in 21 streams in the Nooksack River basin. Independent drainages in the City of Bellingham included Squalicum Creek, Padden Creek, and Whatcom Creek. Four streams draining into Lake Whatcom were surveyed for kokanee, including Park

Creek and Austin Creek in Sudden Valley. Twelve streams in the Nooksack River basin were surveyed including Deer Creek in Ferndale, Bertrand and Fishtrap Creeks in Lynden, and Landingstrip Creek in Acme. Spawning grounds surveys are implemented to provide data to the fisheries co-managers of the Nooksack River Basin (the Lummi Nation, the Nooksack Indian Tribe, and WDFW). Survey data is used to help measure pre- and post-rehabilitation success in areas where riparian restoration projects are planned or located. The survey results also provide insight into the health of Nooksack River Chinook, coho, and chum salmon populations over time.

Water Quality

The Ferndale Stormwater Monitoring Program is through a partnership between the City of Ferndale (COF), Windward High School (WHS), and the NSEA. The goal of this project is to monitor stormwater runoff from the city of Ferndale into the Schell Creek and Nooksack River watersheds to ensure that fecal coliform levels are compliant with Department of Ecology (DOE) standards. Project goals include teaching real-world science skills to WHS students and involving the Ferndale community in citizen science monitoring and salmon habitat restoration.

WHS students have helped restore riparian habitat along reaches in both Schell and Deer creek watersheds, and hundreds of students have become aware of the issues facing local salmon and took action to address them. WHS students have been directly involved in leading the team that sample and test the stream sites. They are learning real world scientific methods and skills that will doubtlessly help them in the goals for the future. Additionally, this program and partnership enabled the



Sterk Dairy Tenmile Creek LWD placement and Riparian Planting Project

design and distribution of a Schell Creek State of the Watershed Report which details the project's highlights and informs readers of the necessity to take steps in conserving water resources.

Washington Conservation Corps

The Washington Conservation Corps (WCC) is a Washington Department of Ecology program. NSEA sponsors one of 34 crews in Washington State. The WCC crew implemented riparian restoration by planting trees, building fences, cabling large woody debris, and maintaining NSEA's extensive native plant nursery. These dedicated individuals braved cold weather, snow, rain, and other forces of nature to ensure NSEA's salmon habitat restoration mission were accomplished.

Washington Service Corps

NSEA sponsors three individual placements each year through the Washington Service Corps (WSC). These year-of-service positions gave much-needed support to NSEA's education, outreach, monitoring, and volunteer programs; allowing NSEA to expand and work with more community members and students. WSC placements aid in educational program development, in-class and community presentations, spawning grounds surveys, community work parties, field trips, development of outreach and membership materials, water quality monitoring, and many other crucial tasks.

Environmental Internships

Western Washington University (WWU) students, Whatcom Community College students, Bellingham Technical College Students and recent graduates worked with NSEA as interns to increase their skills and experience in the nonprofit environmental field. Intern positions include assisting with administration, advancement, scientific monitoring, environmental education and volunteer coordination. Our internship program increases NSEA's capacity to serve more volunteers. Stream monitoring, education programs, restoration projects, GIS mapping, graphic design work, fund-raising and NSEA's newsletter are completed with the help of these 34 amazing interns.

Students for Salmon

Elementary Education Program

NSEA's elementary Student for Salmon (SFS) program, consisting of curriculum manuals, classroom visits and an NSEA led student stream exploration successfully completed its thirteenth year running in 2011. The SFS



Lummi Tribal School Students learn to test the water quality of their local creek with NSEA's education program

program enables these classes to discover the world of streamside science and better understand the health of their watershed. SFS students develop stewardship ethics as they learn about connections in their watersheds and participating in stream restoration projects. In 2011, students planted 239 trees to improve riparian habitat for fish and other wildlife. Students spent a total of 11,792 hours studying salmon and watershed science both in the classroom and out in the field with the guidance of NSEA educators.

Middle School Service Learning Program

In 2011, NSEA worked with 117 Middle School students from Cascade Montessori, Lynden Academy, Mount Baker Junior High as well as Shuksan and Whatcom Middle Schools to implement service learning projects in our local watersheds. With help from NSEA educators, these students spent 1,090 hours applying the academic skills and knowledge they acquire in the classroom to the real-life need to ensure watershed health for salmon in their own community. NSEA's Middle School Service Learning program provides students with a compelling reason to learn, teaches them the skills of salmon habitat restoration and develops an ethic of stewardship, service, and civic responsibility.

Streamside Science & Swimming Upstream

High School Education Programs

In 2011, NSEA worked with 265 high school students from Ferndale, Squalicum and Bellingham High Schools. Students participating in Streamside Science spent over 3,819 hours learning about salmon and stream ecology, water quality, macroinvertebrates and the Squalicum Creek watershed. Additionally, students applied their knowledge by designing and implementing a riparian restoration

project on Squalicum Creek.

NSEA continued our Swimming Upstream Program (SUP) to help reach underserved high school youth throughout Whatcom County with meaningful science and stewardship activities. SUP includes a flyfishing component that deepens awareness and appreciation for our local watershed ecosystem through recreation.

Liam Wood Flyfishers & River Guardians

For the seventh summer, 18 students and community members in Whatcom County were able to participate in two sessions of the Art, Science and Ethics of Flyfishing course, offered through Huxley College at WWU. This three-credit upper-division environmental science class is a program of the Liam Wood Flyfishers and River Guardians and is implemented by WWU in a partnership with NSEA. Huxley College professor and department chair Dr. Leo Bodensteiner focuses this hands-on course on stream ecology concepts and uses flyfishing as a window into the

structure, function, and restoration of river ecosystems and human interaction with these systems. Labs and field trips teach students about fish species and macroinvertebrates while community volunteers from the Fourth Corner Fly Fishers club instruct students during casting practice and fly tying sessions. NSEA staff members act as guest lecturers throughout the course and speak on ethics and stewardship issues, as well as restoration goals for the Nooksack River Basin.

Nooksack River Stewards Program

NSEA renewed its partnership with the United States Forest Service (USFS) Mount Baker Ranger District to implement the sixth year of the award-winning Nooksack River Stewards Program in 2011. This program is a collaboration designed to provide salmon-focused environmental educational opportunities to recreational users of the Nooksack River. The 2011 River Stewards team consisted of one NSEA staff member and four college interns. River Stewards are recruited and trained at the beginning of the summer recreation season and maintain a strong presence in the North Fork Nooksack Basin throughout the summer; operating out of a field base at the USFS Public Service Center in Glacier, WA. River Stewards promote stewardship and provide information about native wild fish and their habitat requirements to people visiting the river; including giving presentations to commercial white water rafting groups, campgrounds guests, fishermen, and other recreationists. More than 2,021 contacts were made with the public and 46 presentations were given.



NSEA's Students for Salmon program participants learning about salmon habitat

Region 2: Nooksack Salmon Enhancement Association - Financial Summary

| Project Name | RFEG Funds | Volunteer Hours | Volunteer Dollars | Funds Leveraged | Total |
|--|------------|-----------------|-------------------|-----------------|--------------|
| Cash Donations | | | | \$77,731.44 | \$77,731.44 |
| ALC- Stream Stewards | | | \$- | \$19,174.94 | \$19,174.94 |
| ALEA- Students for Salmon | | 6,000.00 | \$126,000.00 | \$963.75 | \$126,963.75 |
| Bellingham Cold Storage: Squalicum Creek | | | \$- | \$7,923.58 | \$7,923.58 |
| Conoco/Philips - Middle School Service Learning | | 1,000.00 | \$21,000.00 | \$263.36 | \$21,263.36 |
| Climate Solutions University Students for Salmon | | | \$- | \$5,973.55 | \$5,973.55 |
| EPA Restoration Lummi Reservation | | 2,701.00 | \$56,721.00 | \$15,424.25 | \$72,145.25 |
| Brabec/Robinson - Flyfishing Program | | | \$- | \$6,023.62 | \$6,023.62 |
| USFS Nooksack River Stewards | | 2,500.00 | \$52,500.00 | \$8,166.40 | \$60,666.40 |
| Lummi Natural Resources Stream Stewards | | | \$- | \$50.00 | \$50.00 |

Region 2: Nooksack Salmon Enhancement Association - Financial Summary

| Project Name | RFEG Funds | Volunteer Hours | Volunteer Dollars | Funds Leveraged | Total |
|---|---------------------|------------------|-----------------------|-----------------------|-----------------------|
| River Stewards Printing | | | \$- | \$63.30 | \$63.30 |
| NOAA - Students For Salmon | | 7,000.00 | \$147,000.00 | \$57,860.75 | \$204,860.75 |
| Whatcom Conservation District | | | \$- | \$15,317.99 | \$15,317.99 |
| Friends of Birch Bay- Programs | | 750.00 | \$15,750.00 | \$733.72 | \$16,483.72 |
| Education & Outreach | | 19,951.00 | \$418,971.00 | \$137,939.21 | \$556,910.21 |
| ALEA- Habitat Restoration | | | \$- | \$18,831.40 | \$18,831.40 |
| BP Cherry Point: Education Support | | | \$- | \$6,340.88 | \$6,340.88 |
| Terrell Creek Habitat Restoration | | | \$- | \$20,738.38 | \$20,738.38 |
| South Fork Nooksack Topo Survey | | | \$- | \$1,402.91 | \$1,402.91 |
| Fishtrap Creek LWD Placement | | | \$- | \$6,957.42 | \$6,957.42 |
| Fishtrap Creek Planting | | 1,000.00 | \$21,000.00 | \$2,611.70 | \$23,611.70 |
| Bertrand Creek LWD Placement | | | \$- | \$5,504.54 | \$5,504.54 |
| City of Ferndale Storm Water Quality | | | \$- | \$3,544.89 | \$3,544.89 |
| NFWF Restoration Nooksack Basin | | | \$- | \$49,270.15 | \$49,270.15 |
| NFWF Restoration Multiple Creeks | | | \$- | \$46,199.02 | \$46,199.02 |
| DOT Terrell Creek Buffer Mitigation | | | \$- | \$3,253.56 | \$3,253.56 |
| Scott Creek Fish Passage Project | | | \$- | \$53,032.56 | \$53,032.56 |
| Turner/Breckenridge Bridge Placement | | | \$- | \$78,972.19 | \$78,972.19 |
| Smith Creek LWD Placement | | | \$- | \$480.11 | \$480.11 |
| Agate Bay Creek Fish Passage Project | | | \$- | \$60,911.49 | \$60,911.49 |
| Landingstrip Creek Passage / LWD | | | \$- | \$445.05 | \$445.05 |
| Dakota / Tenmile Creek Fish Passage | | | \$- | \$181.95 | \$181.95 |
| Sterk/TenMile Creek Flood Control | | | \$- | \$993.40 | \$993.40 |
| Bornstein Seafood - Squalicum & Whatcom | | | \$- | \$4,024.37 | \$4,024.37 |
| South Fork LWD Placement | | | \$- | \$873.50 | \$873.50 |
| South Fork Acquisition & Restoration | | | \$- | \$47,826.73 | \$47,826.73 |
| PSAR - South Fork | | | \$- | \$41,150.78 | \$41,150.78 |
| RCO - Nooksack Forks Tributaries | | | \$- | \$37,410.39 | \$37,410.39 |
| WCD Habitat Restoration | | | \$- | \$8,184.45 | \$8,184.45 |
| Anderson Tributary Fish Passage | | | \$- | \$3,377.25 | \$3,377.25 |
| Maple Creek Reach Property | | | \$- | \$4,211.67 | \$4,211.67 |
| Nursery/Equip | | | \$- | \$53,468.70 | \$53,468.70 |
| Habitat Restoration | | 1,000.00 | \$21,000.00 | \$560,199.44 | \$581,199.44 |
| Water Quality Monitoring | | | \$- | \$619.98 | \$619.98 |
| People for Lake Padden | | | \$- | \$2,876.00 | \$2,876.00 |
| Salmonid Population Monitoring | | 1,200.00 | \$25,200.00 | \$1,735.34 | \$26,935.34 |
| Water Quality Monitoring | | 1,200.00 | \$25,200.00 | \$5,231.32 | \$30,431.32 |
| WDFW- RFEG Funds Administration | \$77,374.98 | 500.00 | \$10,500.00 | \$- | \$87,874.98 |
| RFEG Funds Habitat Restoration | \$23,475.41 | | \$- | \$- | \$23,475.41 |
| Ed, Volunteer, Monitoring | \$11,259.57 | 8,368.00 | \$175,728.00 | \$- | \$186,987.57 |
| <i>Totals</i> | <i>\$112,109.96</i> | <i>53,170.00</i> | <i>\$1,116,570.00</i> | <i>\$1,484,471.38</i> | <i>\$2,713,151.34</i> |

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Finance Manager

Kate Underwood

Program Coordinator

Annitra Ferderer

Stream Restoration Technicians

Dave Barker, John Hymas

Washington Conservation Corps/AmeriCorps placements

Crew Supervisor

Justin Lamb

2010-2011 Washington Conservation Corps Crew Members

Rachel Allison, Ashley Gullicksen, Stephanie Huck,
Alex Vaughn, Sam Wiggins

2011-2012 Washington Conservation Corps Crew Members

Taryn Heisler, Corey Havens, Matt Long, Alexis
Condit, Lael Balik

2010-2011 Washington Service Corps AmeriCorps Placements

Amanda Allen, Monica Blanchard, Colin Riordan

2011-2012 Washington Service Corps AmeriCorps Placements

Maggie Long, Sean Martin, Nicholas Kunkel



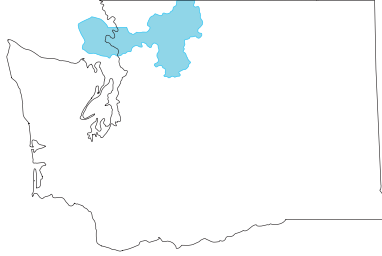
Students for Salmon hard at work
in their outdoor classroom



Otto Agate Bay Creek - Before



Otto Agate Bay Creek - After



REGION 2: Skagit Fisheries Enhancement Group

Report for 2011 calendar year



CONTACT INFORMATION
Skagit Fisheries Enhancement Group
PO Box 2497 • 1202 South 2nd Street, Suite C
Mount Vernon, WA 98273
Phone: (360) 336-0172
Fax: (360) 336-0701
Website: www.skagitfisheries.org

Mission Statement

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.

Overview

The Skagit Fisheries Enhancement Group (SFEG) completed another year of working with individuals and partners to advance our mission of increasing local salmon populations in the Skagit, Samish and Island community watersheds. Since 1990, we have remained dedicated to this mission, engaging volunteers, landowners, project partners and community members to implement high quality habitat salmon restoration work. Our education programs have expanded to engage more young people who are the future leaders and stewards of this beautiful landscape. While ultimately SFEG's goal is to have more salmon in our watersheds, we hope that through our restoration and education programs, we can make the place we live a better home for forests, birds, wildlife, families and future generations to thrive.

The Board, staff and volunteers at SFEG work to leave the Skagit Valley region better than it was when we started. Our restoration and education programs do this one person, one project, one landowner, one child at a time. By assisting, educating and empowering individuals to take these actions, collectively it will lead to better habitat, cleaner waterways and healthier ecosystems for all living things now and the future.

Project Highlights

Habitat Restoration and Stewardship Projects

Day Creek Habitat Restoration

SFEG works with private landowners in the Day Creek Community to identify and implement salmon restoration projects since 2005. Our efforts focus on restoring riparian vegetation along Lower Day Creek and placing large woody debris structures in the stream to reduce temperatures and



Installing large woody debris jams in Day Creek

improve fish habitat. SFEG installed 31 engineered log jams along 5,500 feet of stream. Log structures were placed using a helicopter and assembled by a local contractor, SFEG staff and volunteers. SFEG monitors the effectiveness of this project by conducting stream cross-sections before and after construction. Temperature logging devices were installed at four locations to collect data for analysis of the project's affects on water temperatures, as high temperatures are identified as a limiting factor for salmon. In addition to log jams, SFEG staff and volunteers revegetated 14.8 riparian acres in the project area. Funding for this phase of Day Creek restoration comes from WA Dept of Ecology (WDOE) and SRFB grants.

Upper Skagit Knotweed Program

The Upper Skagit Knotweed Control Project focuses on the implementation of a strategic approach to controlling the invasive plant species knotweed (*Polygonum spp.*) in the Upper Skagit watershed. This program was developed by The Nature Conservancy in 2001 and is a top-down strategic approach to controlling knotweed. 2011 was SFEG's second year leading this unique program. Knotweed is detrimental to freshwater ecosystems and natural riparian processes, which negatively impacts high priority salmon habitat. Since 2001, the effort has identified 1,900 patches of knotweed, achieved over 50% control of knotweed and is recognized as a model for invasive species work in Washington State.

The project area starts at the confluence of the Skagit and Sauk Rivers, and includes the mainstem Skagit, Sauk, Suiattle and Cascade Rivers, their tributaries and surrounding landscapes. SFEG staff assisted by a Washington Conservation Corp (WCC) crew thoroughly surveyed the 100-year floodplain along 53.8 mainstem

river miles along the Skagit and Sauk rivers, and 34.2 miles of tributaries - 21 more tributary miles than in 2010. The results of the additional tributary surveys were positive with no new knotweed patches found in designated clean tributaries. SFEG and WCC received on-the-ground assistance from U.S. Forest Service, Seattle City Light, North Cascades National Park, and the Sauk-Suiattle Tribe. Funding for the knotweed control program came from the WA Dept of Agriculture and Ecotrust through a NOAA Community Restoration Fund partnership.

Skagit Floodplain Riparian Project

The Skagit Floodplain Riparian projects represent a major effort to restore vegetation communities and floodplain function in the Skagit River floodplain. The floodplains of the Skagit provide important freshwater habitat for all Chinook salmon fry, but more expressly for those life history strategies that depend on freshwater habitat for extended rearing such as parr migrants and yearlings. Adult Chinook spawn in the mainstem of the Skagit River. Restoration and protection in the Upper Skagit Floodplain is a high priority for Chinook salmon recovery. SFEG is working with four partner landowners who own conservation properties in the floodplain, including the U.S. Forest Service, Seattle City Light, Skagit County, and the Skagit Land Trust.

The project involves planting and maintaining riparian vegetation on 14 work-sites along the Skagit and Sauk Rivers. SFEG has been assisted in these efforts by numerous volunteers as well as contract crews from Whatcom County Department of Corrections and the WCC. Accomplishments at these sites in 2011 include installation of 2,500 feet of livestock exclusion fencing at the Skagit Mainstem site, and planting of 12,360 plants along 3.6 miles of the Skagit River.

Seattle City Light Stewardship Program

In 2010, SFEG implemented of the Seattle City Light Stewardship Program. This program conducts quarterly visits to properties purchased through City Light's ESA and Wildlife Land funds and effectively detects any stewardship issues. SFEG is excited by this unique partnership that allows us to steward large quantities of valuable floodplain habitat. Seventeen properties were visited quarterly for stewardship assessments and four properties were added in 2011. Stewardship actions were recommended at several properties for 2012. Funding has been secured to perform recommended actions at five properties. The most common issue noted was the presence of invasive plant species and garbage dumping.



SFEG staff and volunteers performing knotweed surveys along the Sauk River

Skagit County Natural Resource Stewardship Program

SFEG, working with the Skagit County Department of Public Works, implemented riparian restoration on private lands in the Samish and Skagit basins through the Natural Resource Stewardship Program. The project is funded through WDOE and provides an opportunity for private landowners to obtain small grants (up to \$35,000) to restore riparian vegetation and improve water quality. To date, SFEG has implemented plans on eight properties, and has prepared or is in the process of preparing plans for six other sites. In 2011, we constructed 2,615 feet of livestock exclusion fencing, and planted 1.2 acres of riparian area along 640 feet of stream. We are looking forward to working with new participating landowners in 2012.

Davis Slough Hydrologic Connectivity

In partnership with the Skagit County Department of Public Works and Seattle City Light, SFEG is working to develop a project that will reestablish unrestricted fish passage to and from Davis Slough and restore natural hydrologic flow paths across Seattle City Light's Iron Mountain Ranch Property. KPFF Consulting Engineers were contracted with SRFB grant funds to develop conceptual bridge design plans and cost estimates for replacing the existing 36 inch culvert with a 60 foot bridge. GeoEngineers were retained to evaluate hydrology and the current and historic flow paths along a 2.5 mile long stretch of the South Skagit Highway adjacent to Seattle City Light's 272 acre Iron Mountain Ranch property and Davis Slough. Construction of the bridge and re-establishment of hydrologic connectivity will improve access and habitat conditions in approximately two-miles of high quality off-channel rearing habitat.

Swan Lake Feasibility Study - Whidbey Island

SFEG has been working with Island County Public Works and the Swan Lake Watershed Preservation Group to complete a preliminary feasibility assessment of the potential for restoring fish access to Swan Lake. Swan Lake is a high functional salt marsh wetland complex on the west side of Whidbey Island near Oak Harbor. Coastal Geologic Services (CGS) was retained to complete an analysis of historical maps and aerial photos, plus information on the geomorphology of the site. CGS concluded that the area was formerly a salt marsh that was likely seasonally connected to the marine environment. SFEG and CGS received additional funding from Island County in 2011 to collect data on lake levels and bathymetry, lakebed sediments and stream flows. These data were used to prepare a successful SRFB application to support completion of an engineering feasibility assessment and identify specific restoration alternatives. Work on the feasibility assessment will be completed in 2012.

Thatcher Bay Nearshore Restoration Project - Blakely Island

Since the 1940s wood chips from an old lumber mill have completely buried intertidal substrates suitable for forage fish spawning at Thatcher Bay on Blakely Island. This wood waste is releasing sulfide, a natural by-product of wood decomposition, at levels that are toxic to benthic flora and fauna. The proposed restoration of the area will include removing 12,000 cubic yards of wood waste and refilling the excavated area with sediments common to the surrounding areas. In 2011, 90% designs were completed and the permitting process continued in hopes of 2013 construction. Funds have been secured from DNR, SRFB and from ESRP for construction.

Native Plant Nursery

Volunteers led by SFEG's WCC Interns continued to operate a native plant nursery to grow bare root plants to a larger size prior to installing them at restoration sites where competition with invasive species is very high. Over 525 hours were contributed by 70 volunteers in 2011 to care for 8,000 potted plants. Nearly 4,700 potted plants, shrubs and trees from the nursery were planted at 14 project sites in 2011. Volunteers potted plants, performed summer watering and worked with students from Cascades Job Corps and Bellingham Technical College to conduct regular nursery maintenance via weekly work parties.

Education Program Highlights

Junior Stream Stewards

Junior Stream Stewards takes middle school students out of the classroom and into the field to learn all about



Salmon in the Classroom student releases a young coho fry.

watersheds and salmon. SFEG staff and volunteers visit each month for classroom and field activities, including a service project in the spring. During the 2010-11 school year we engaged 415 students at five schools throughout Skagit County (Conway, Edison, Allen, Sedro Woolley and Concrete). In the 2011-12 school year the number grew to 585 middle school students, with the inclusion of the entire 7th grade at Cascade Middle School. Funds from Skagit County's Clean Samish Initiative as well as WDFW's ALEA have augmented private donations and allowed this expansion of this popular program.

Salmon in the Classroom

SFEG coordinated the raising of 200 salmon eggs for fourth grade students in Mount Vernon during 2011. 75 students at Madison and Lincoln Elementary Schools learned about salmon by raising them from egg to fry in large chilled aquariums. Students toured the Marblemount Hatchery in preparation for raising salmon in their classrooms and then releasing their coho fry into local streams. 50 new fourth graders are participating in this program this school year and will release their coho fry into area streams during the spring of 2012.

Kids in Creeks

Throughout the school year, teachers request service-learning projects for their students. The Kids in Creeks program includes a classroom presentation by SFEG staff and a service project at one of many restoration sites in Skagit County. In 2011 SFEG staff and volunteers worked with 167 K-12 students from Emerson Alternative High school, Immaculate Conception Regional School, and Mount Vernon High School, teaching them to plant native

riparian plants to improve habitat for salmon and many other animals.

Samish Watershed Outreach

SFEG is one of many partners participating in Skagit County's Clean Samish Initiative, an effort to raise awareness for water quality issues in the Samish Watershed and offer assistance to landowners wanting to implement corrective measures on their property. In addition to working with two Samish watershed schools for Junior Stream Stewards, SFEG participated in the Samish Bay Bivalve Bash, and held two volunteer planting parties at the headwaters of the Samish River, on Whatcom Land Trust property. SFEG hosted a very successful Samish River Family Festival in October at Donovan Park. Many partner organizations helped present this fun event to educate the public about the water quality issues facing the Samish Watershed. About 150 community members attended, learning from educational games and displays, and viewed Chinook salmon in Friday Creek. In 2012, SFEG is excited to partner with the Samish Indian Nation with new grant funds received from the Department of Ecology. Specifically, we are collaborating on efforts to control knotweed and revegetate priority riparian areas where knotweed treatment occurs. The Tribe's effort to systematically survey and control knotweed began in 2010 and SFEG's new grant funds are already being used to plan revegetation efforts for three properties where significant knotweed treatment has taken place.



Knotweed Washington Conservation Corp Crew

Upper Skagit Outreach

Grant funds from ALEA this year provided for a Hatchery Outreach program, which entailed training volunteers to lead tours of the Marblemount Hatchery during the winter eagle season. This year twelve volunteers

were trained to lead tours of the Marblemount Hatchery. During the 2010-11 season, over 1,000 people visited the hatchery in 2 months. This year we expect similar numbers of visitors.

Monitoring Program Highlights

Vegetation Monitoring

With funding from The Mountaineers Foundation, SFEG hosted a workshop on monitoring vegetation at restoration sites for volunteers. SFEG was assisted by an intern dedicated to monitoring vegetation whom coordinated and worked with 14 volunteers at selected planting sites. SFEG monitored 19 sites and 201 plots (more than 20 acres) for 2011. The monitoring data are being used to confirm the effectiveness of riparian plantings, and, where survival targets are not being met, to identify the number of replacement plants needed and guide species selection and planting techniques that will improve our success rate in the future.

Spawner Survey Monitoring

SFEG volunteers and staff continued to collect salmonid spawning data for 21 project reaches and four WDFW index streams. SFEG's data are provided to fisheries co-managers (WDFW and the Tribes) and

combined with data from the rest of the state to develop an escapement count for Tribes, commercial fishermen and sports fishermen. In 2011, SFEG's spawner survey program was supported by funding from the Burning Foundation. A monitoring workshop was held in early October to train volunteers. 27 volunteers surveyed 15.6 miles of habitat in 25 separate streams each week during spawning season. As of December 2011, we had counted 377 coho, 51 Chinook, 5,447 Pink, 10 chum and 447 kokanee.

In-Stream Monitoring

SFEG's instream monitoring program was supported by funding from the Burning Foundation in 2011. Two interns were engaged to work with volunteers. A workshop was held to train volunteers how to conduct in-stream monitoring. In-stream monitoring was conducted at 10 locations where SFEG had previously conducted restoration projects, or where projects are planned in the near future. Instream monitoring is conducted to track physical changes in stream conditions where restoration has occurred in order to determine the effectiveness of habitat restoration actions for salmon.

In all, over 2,177 volunteer hours were documented assisting with monitoring programs in 2011.

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Kyle Koch, Bengt Miller, John Rohde

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(Washington Conservation Corp)

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Kristin Rine, Conservation Assistant

Katie Lutz, Education Assistant

Washington Conservation Corps Crew Members

Supervisor: Rob Crawford

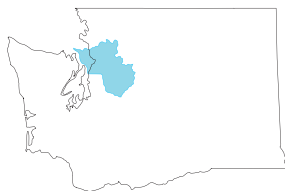
Alex McCarty-Assistant Supervisor, Shawn Skinfill,

Ben Anderson, Abby Jane Garlock,

Nathan Eastabrooks

Region 2: Skagit Fisheries Enhancement Group - Financial Summary

| Project | RFEG Funds | Volunteer Hours | Volunteer Value \$ | Other Funds | In Kind | Total |
|---------------------------------------|------------------|-----------------|--------------------|--------------------|------------------|--------------------|
| Admin Support | \$45,352 | 497 | \$10,437 | \$47,448 | \$3,325 | \$106,563 |
| AmeriCorps Support | \$11,848 | 307 | \$6,437 | \$34,375 | \$74,340 | \$127,000 |
| Anderson Creek | | 31 | \$641 | \$17,804 | | \$18,444 |
| Clean Samish Initiative | | 125 | \$2,625 | \$3,522 | | \$6,147 |
| Day Creek Restoration | | 283 | \$5,933 | \$243,763 | | \$249,695 |
| Davis Slough | | | | \$75,497 | | \$75,497 |
| Education | \$19,317 | 564 | \$11,834 | \$27,070 | \$345 | \$58,566 |
| FFFPP Development | | | | \$3,242 | | \$3,242 |
| Finney Creek Restoration | | 160 | \$3,360 | \$8,479 | | \$11,839 |
| Fund-raising | | 119 | \$2,489 | \$17,431 | | \$19,920 |
| Hansen Creek | | 66 | \$1,386 | \$29,958 | \$121,291 | \$152,635 |
| Habitat Work Schedule | | | | \$8,629 | | \$8,629 |
| Hatchery Education | | 419 | \$8,799 | \$6,312 | | \$15,111 |
| Howard Miller Steelhead Park | | 61 | \$1,271 | \$54,893 | \$5,344 | \$61,508 |
| Iron Mountain Ranch | | 9 | \$189 | \$9,899 | | \$10,088 |
| Junior Stream Stewards | | 754 | \$15,834 | \$28,401 | | \$44,235 |
| Knotweed Control | | 47 | \$987 | \$86,549 | | \$87,536 |
| Middle Skagit | | | \$- | \$1,528 | | \$1,528 |
| Monitoring Support | \$24,308 | 2177 | \$45,717 | \$27,513 | | \$97,539 |
| Native Plant Nursery | | 527 | \$11,067 | \$12,475 | \$1,800 | \$25,342 |
| Natural Resources Stewardship Project | | 112 | \$2,352 | \$20,894 | | \$23,246 |
| Project Development | \$25,916 | 132 | \$2,762 | | | \$28,678 |
| Red Cabin Creek | | | | \$3,835 | | \$3,835 |
| Savage Slough (SRSC) | | | | \$3,994 | | \$3,994 |
| SCL Stewardship | | 7 | \$147 | \$32,671 | | \$32,818 |
| Sk Co Clean Water | | 425 | \$8,920 | \$24,982 | \$580 | \$34,482 |
| Skagit Floodplain Restoration | | | | | | \$- |
| Skagit Floodplain Riparian | | 1029 | \$21,609 | \$174,762 | \$29,079 | \$225,450 |
| Swan Lake Nearshore Restoration | | 46 | \$956 | \$4,706 | | \$5,661 |
| <i>Total</i> | <i>\$126,742</i> | <i>7893</i> | <i>\$165,748</i> | <i>\$1,010,632</i> | <i>\$236,104</i> | <i>\$1,539,226</i> |



REGION 3: Sound Salmon Solutions

Stilly-Snohomish FE Task Force



CONTACT INFORMATION:

Sound Salmon Solutions

1911 Vernon Road

Lake Stevens, WA 98258

Phone: (425) 252-6686

E-mail: info@soundsalmonsolutions.org

Website: www.soundsalmonsolutions.org

Mission Statement

The mission of Sound Salmon Solutions is to engage in community outreach, education, and habitat restoration projects that ensure the future of salmon in the watersheds of the Stillaguamish and Snohomish rivers and Island County.

To achieve this mission the following goals are pursued: restoration and enhancement of salmon habitat, education and outreach that facilitates necessary cultural shifts, and collaborative partnerships that increases capacity for effective long-term accomplishments.

Overview

Established in 1990 as a 501(c)(3) nonprofit corporation, the Stilly-Snohomish Fisheries Enhancement Task Force has a rich history of being a community-based, volunteer supported, membership organization dedicated to salmon recovery. In late 2011, the organization expanded its strategic vision and began doing business as Sound Salmon Solutions.

A dedicated staff supported by a committed base of members, volunteers, and local public and private partners has worked cooperatively with landowners, government agencies, tribes, businesses, service organizations, and schools to increase personal and public awareness, support, and involvement in salmon recovery projects. These alliances have provided donated labor, services and matching funds in support of our mission.

Project Highlights

Habitat Restoration

The organization engaged in nine salmon habitat restoration projects on 12.47 acres with a total of 9,992 plantings along 1.6 miles of stream bank. WA Department of Fish and Wildlife (WDFW), Salmon Recovery Funding Board (SFRB), WA Department of Ecology (WDOE), WA State Parks, Snohomish Conservation District, King Conservation District (KCD), Snohomish County Department of Surface Water Management, City of Arlington, Ducks Unlimited, Girl Scout Camp River Ranch, National Fish & Wildlife Foundation (NFWF), REI, Seattle City Light, Stillaguamish Tribe, Tulalip Tribe, and Pearl Jam provided funding for the projects.

Fish Passage

The organization completed a fish passage culvert removal and bridge placement along Anthracite Creek. Funding was provided by the King Conservation District. Collaborative partner, Timberlane Village, provided design and construction support.

Assessment

The organization engaged in two Salmon Recovery Funding Board projects. The Jim Creek (completed) and Cherry Creek (initiated) projects involved riparian habitat assessment for design of in-stream wood structures. WDFW provided technical support during the development phase of the Cherry Creek project.

Monitoring

The organization conducted a third season of macro invertebrate sampling in Jim, Turlo and Canyon Creeks. The WDOE provided funding and the Evergreen Fly Fishing Club provided volunteers to collect survey data. In addition, vegetation monitoring occurred on 12 active riparian restoration projects.

Maintenance

Habitat field staff completed vegetation maintenance - using manual, mechanical and chemical methods - on 16 project sites. WDFW Aquatic Lands Enhancement Account provided funding for three projects on public lands along the Snoqualmie and Tolt River corridors. Collaborative partner, Ducks Unlimited, provided funding for 28 acres at Stillwater Wildlife Area.



A volunteer prepares to fling a Chum carcass

Program Highlights

Nutrient Enhancement

Habitat staff conducted two fish flings in December 2011. All carcasses were secured from the Stillaguamish Tribal Hatchery. Distribution occurred throughout the lower North Fork Stillaguamish Basin on Pilchuck Tree Farm property. A total of 310 Chum salmon were flung.

K-12 Education and Involvement

Our education staff provided 74 lessons reaching 3,085 students from 63 different classes throughout Snohomish county. In addition, 106 field trips were conducted in support of the classroom-based lessons or as stand-alone learning opportunities. Many of the field trips included a service project.

Over the summer education staff ran an environmental day camp funded by The Russell Family Foundation. Participants went on field trips tracing the salmon life cycle from freshwater upstream to downstream marine, checking water quality along the way. Students generated outreach materials to share their knowledge within their communities.

Our education staff also provided support to collaborative partners, WSU Beach Watchers and the Stillaguamish Tribe during beach field trips and hatchery tours for local youth.

Adult and Community Education and Involvement

Our staff attended 14 expos, fairs and festivals throughout the Stillaguamish, Snohomish and Island County watersheds to educate the public on salmon related issues such as water quality degradation due to fecal coliform from pet waste. Hands-on activities for youth provided many teachable moments. Good stewardship behaviors and best management practices were highlighted too.

In addition, an educational presentation was given to the Evergreen Fly Fishing Club on macro invertebrates as an indicator of water quality. Another presentation was given to the Ridgeport Homeowners Association on neighborhood stormwater impacts and stream restoration techniques.

Region 3: Sound Salmon Solutions - Financial Summary

| Project | RFEG Funds | Volunteer Hours | Volunteer Value \$ | Other Funds | In Kind | Total |
|---------------------------------------|------------|-----------------|--------------------|-------------|----------|------------|
| Administration | | | | | | |
| Development | | | | 19,474.88 | | 19,474.88 |
| Ed | 2,656.26 | 338.00 | 7,098.00 | | | 9,754.26 |
| Habitat | 37,521.28 | 489.00 | 10,269.00 | | 220.00 | 48,010.28 |
| Infrastructure | 64,757.79 | 169.75 | 3,564.75 | | 5,938.39 | 74,260.93 |
| Internships | | 533.50 | 11,203.50 | | | 11,203.50 |
| Staff | 107,836.37 | 117.50 | 2,467.50 | | 3,031.00 | 113,334.87 |
| Habitat | | | | | | |
| Anthracite Creek | | 425.25 | 8,930.25 | | 4,042.00 | 12,972.25 |
| Cherry Creek Feasibility | | 33.00 | 837.00 | 2,247.84 | | 3,084.84 |
| ESSC Net Pen | 122.30 | | | | | 122.30 |
| Jim Creek Restoration | | 171.50 | 3,617.50 | 20,066.02 | | 23,683.52 |
| Middle Pilchuck River Restoration | | 333.00 | 7,209.30 | 22,761.69 | 3,399.43 | 33,370.42 |
| Middle Snoqualmie River Restoration | | 132.00 | 2,772.00 | 36,000.00 | 1,191.00 | 39,963.00 |
| Pilchuck Reach | | | | 66,225.53 | | 66,225.53 |
| Possession Point Park Planting | | 140.25 | 2,953.25 | 1,221.24 | | 4,174.49 |
| Qwuloolt Estuary Restoration | | 1,960.50 | 41,262.00 | 66,441.41 | 95.88 | 107,799.29 |
| Snohomish Habitat | | 45.00 | 945.00 | | | 945.00 |
| Snoqualmie Valley Restoration | | 288.63 | 6,061.25 | 5,663.40 | 7,834.77 | 19,559.42 |
| Stewardship Partners-Carnation | | 70.00 | 1,470.00 | 4,864.00 | | 6,334.00 |
| Stillaguamish Habitat Restoration | | 148.43 | 3,117.00 | 11,515.04 | | 14,632.04 |
| Stillaguamish Knotweed and Riparian | | 1,143.18 | 24,048.32 | 55,636.40 | 6,159.66 | 85,844.38 |
| Stillwater Restoration Project | | 375.50 | 7,885.50 | 4,955.00 | 7,031.03 | 19,871.53 |
| Sultan Maintenance | | 20.00 | 420.00 | 1,096.53 | | 1,516.53 |
| Tolt Restoration Project | | 154.50 | 3,244.50 | 18,882.61 | 144.00 | 22,271.11 |
| Tolt Restoration - Camp River Ranch | | 323.25 | 7,523.25 | 45,000.00 | 2,512.16 | 55,035.41 |
| Upper Tychman Slough | | 269.63 | 5,662.23 | 97,692.49 | 7,468.85 | 110,823.57 |
| Volunteer Coordination | | 464.00 | 9,744.00 | 1,068.25 | | 10,812.25 |
| Wattenbarger Culvert Project | | 25.00 | 525.00 | | 200.00 | 725.00 |
| Whitehorse Creek Riparian Enhancement | | 556.50 | 11,686.50 | 13,680.00 | 1,276.00 | 26,642.50 |

Region 3: Sound Salmon Solutions - Financial Summary (Continued)

| Project | RFEG Funds | Volunteer Hours | Volunteer Value \$ | Other Funds | In Kind | Total |
|--|-------------------|------------------|--------------------|-------------------|------------------|---------------------|
| Education: | | | | | | |
| Be the Solution | | 125.25 | 2,630.25 | 12,075.65 | | 14,705.90 |
| General | | 381.00 | 8,001.00 | 188.69 | 117.00 | 8,306.69 |
| NOAA | | | | 43,710.19 | 4,204.50 | 47,914.69 |
| PS I Love You | | 402.25 | 11,091.77 | 21,162.93 | 402.99 | 32,657.69 |
| Qwuloolt Ed | | 52.25 | 1,097.25 | | | 1,097.25 |
| Restoration Ecology for Young Stewards | | 60.00 | 1,260.00 | 22,798.48 | | 24,058.48 |
| River Stewards | | 131.75 | 2,766.75 | 1,500.00 | | 4,266.75 |
| Storm Drain Defenders | | 33.00 | 693.00 | 500.00 | | 1,193.00 |
| Stream Detectives | | 203.50 | 4,273.50 | 2,600.00 | | 6,873.50 |
| SWM Youth Ed | | 24.75 | 519.75 | 12,565.91 | | 13,085.66 |
| Tree Connections | | 469.25 | 11,545.35 | 7,803.24 | 698.02 | 20,046.61 |
| Watershed Detectives | | 2.50 | 52.50 | 4,168.37 | | 4,220.87 |
| <i>Total</i> | <i>212,894.00</i> | <i>10,612.37</i> | <i>228,447.72</i> | <i>623,565.79</i> | <i>55,966.68</i> | <i>1,120,874.19</i> |

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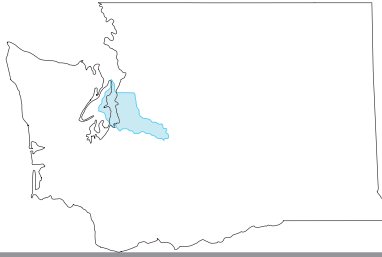
Habitat Project Coordinator, Kevin Lee

*AmeriCorps Intern/Education & Habitat Program
Coordinator*, Sarah Nelson

Habitat Specialist, Kalem Howell

Habitat Technician, Jeff Mallahan

WCC-AmeriCorp Interns, Kristin Rhine,
Monique Silva-Crossman, Sam Harb, Stephanie Leeper



REGION 4: Mid Puget Sound Fisheries Enhancement Group



CONTACT INFORMATION

Mid-Sound Fisheries Enhancement Group

7400 Sand Point Way NE, Suite 202 North
Seattle, WA 98115
Phone: (206) 529-9467
Fax: (206) 529-9468
Website: www.midsoundfisheries.org

Mission Statement

The mission of the Mid Puget Sound Fisheries Enhancement Group is to conserve and restore self-sustaining salmonid populations through close involvement with diverse community interests.

Our Vision

To the benefits of future generations, we envision that robust populations of naturally spawning salmonids will thrive in our region for the use and enjoyment of all.

Overview

Mid Puget Sound Fisheries Enhancement Group (Mid Sound), founded in 1991 as a 501 (c)(3) tax-exempt non-profit organization, includes volunteer members representing businesses, local governmental agencies, tribal interests and environmental organizations.

Mid Sound directly supports the enhancement of salmonid populations and habitat throughout our region. The geographic region includes the Lake Washington basin (WRIA 8), Green/Duwamish River basin (WRIA 9), streams draining along the King County shoreline and Kitsap County streams flowing into the Sound from the Northeast end of the Hood Canal Bridge, south to the Kitsap-Pierce County line (WRIA 15).

Since 1991, Mid Sound has completed more than 270 projects, including stream bank fencing, native tree and shrub plantings, fish blockage removal, wetland restoration, fish enhancement and monitoring, education and training events. Each of these projects serve as a catalyst to building community partnerships in Puget Sound. Together, these partnerships contribute invaluable time and resources for the recovery of salmon in the Pacific Northwest. It is our belief that community-based salmon recovery develops educational opportunities for volunteers to learn about, and become part of the interwoven complexities of our environment.

Project Highlights

- Began Strategic Planning & Board Development Process
- Corrected 2 Fish Passage Barriers
- Restored over 1 mile of stream
- Created partnerships with 10 new partners

Habitat Project Highlights

Urban Stream Initiative

Mid Sound has begun working with engineers, contractors, cities and landowners to implement habitat enhancing projects on several small urban streams in and around Seattle. In addition to the projects highlighted below, we have assisted on projects on Deer & Willows Creek south of Edmonds, and on Lyon Creek in Lake City. In these projects, we are usually asked to provide specific services on projects that are already designed and awarded to a contractor. These services include: de-watering, fish exclusion, permitting and in some cases, actual hand installation of Large Woody Debris (LWD) structures. Loss of property/infrastructure and flooding are the main motivations for the projects. Mid Sound's involvement ensures that these projects are conducted in ways that maximize habitat protection and enhancement.

Littlebrook Creek – Fish passage barrier replacement and in-stream restoration

Seattle has precious few urban streams that are healthy enough to support salmon production. Many have not just one, but several fish passage barriers, little to no woody debris habitat, and are severely encroached upon by urban development and invasive vegetation. Littlebrook Creek is one such creek that has a high potential to support salmon. Littlebrook Creek is a small tributary to Thornton Creek in North Seattle; it has historically supported coho salmon and trout, but due to a perched and undersized culvert at its mouth, has long been missing coho. We worked with eight landowners within very tight constraints to remove two perched culverts. The culverts were two feet wide and 30 feet long with over a 5% slope and almost two foot perch. In its place, we put large concrete box culvert, six feet wide with a natural rock boulder cascade bed to reduce flow energy and allow for easier migration along an otherwise impassable slope. Mid Puget Sound Fisheries Enhancement Group partnered with the Seattle Public Utilities, King Conservation District (KCD) and the Seattle Housing Authority to fund this project. We also want to give special thanks to Natural Systems Design (as Engineer), and Maple Ridge Excavating (as Contractor) for

their hard work and long hours to make this project such a success. Thanks also goes to the landowners who gave up their yards for the summer in sacrifice for salmon!

Longfellow Creek - Urban creek restoration designs

In west Seattle, Longfellow creek winds through the urban streets and then into the Duwamish waterway at the mouth of the Green River. This creek endures residential and industrial encroachment, channelization and extensive pollution - making a once productive stream one known for its mysterious salmon pre-spawning mortalities. Mid Sound is working with the City of Seattle, Seattle Public Utilities, the KCD and streamside landowners to bring this creek back to life. We are working on designs to maximize a small space for salmon habitat. What was once a road side ditch with small patches of green space invaded with knotweed and blackberry, is planned to be a widened channel with small meanders, woody debris habitat and natural canopy cover. This project will hopefully be the example for future urban stream restoration on Longfellow Creek and other urban streams with tight boundaries.



Volunteers from Whole Foods and Select Fish taking a break after making quick work of 450 native plants

Kelsey Creek - Riparian restoration and in-stream channel improvements

Kelsey Creek is located in Bellevue, WA and is one of the last known urban streams to support Chinook salmon. KCD and NFWF funded the restoration of 200 linear feet of Kelsey Creek. Sixty pieces of LWD were installed to add stream complexity and habitat value. The large wood provides places of refuge for migrating salmonids, and stabilized the banks from further erosion and excessive sediment deposition. The spawning areas were supplemented with natural round, washed stream gravels and cobble for spawning substrate - something necessary,

and unfortunately lacking, for Chinook spawning. 450 native plants were also installed in the riparian corridor. These plants will provide shade and foliage to the creek, and encourage wildlife that supports healthy stream functions.

Tributary to Clear Creek – In-stream restoration and grade control

Mid Sound is working with the Kitsap Surface and Storm Water team to restore a tributary to Clear Creek in Silverdale. This project is in the design phase and includes a culvert replacement and in-stream improvements to create resting pools for migrating fish and off channel habitat. One of the challenges with this project addresses is the steep slopes that prove to be a challenge for migrating fish. The site will be supplemented with native plantings for additional canopy cover and bank stabilization. We will work in very close cooperation with the Clear Creek Task Force, a group with a proven successful track record when it comes to restoring Clear Creek.



Trout being released into the Green River after being “rescued” from the de-watering area.

Washington State Parks

Washington State Parks (Parks) has contracted with us to address several of their fish passage improvement projects at Flaming Geyser State Park. Three fish passage improvement projects are currently in the design phase and include culvert replacements that allow salmon easier access to upstream habitat. This Interagency Agreement between Mid Sound and Parks will allow completion of projects that would otherwise be delayed due to insufficient Parks staff resources. It will provide Mid Sound with projects in a highly visible setting, allowing for valuable outreach



Looking upstream at new side channel construction at Riverview Park on the Green River

opportunities.

North Fork Newaukum Creek

This year saw the continuation of our work on Newaukum Creek north of Enumclaw. As we return to our habitat restoration “roots” in 2012-13, we hope to identify and begin work on additional fish passage and riparian projects on this main coho tributary to the Green River. We will be returning to past projects for much needed monitoring and maintenance. Our current work on Newaukum Creek is funded through a Landowner Incentive Program grant from KCD and is matched through cash and in-kind contributions from the landowner.

Big Spring Creek Smolt Trap – Volunteer trapping and recording salmonid smolt

June saw the conclusion of our 3-year coho out-migration monitoring activities on Big Spring Creek, the largest tributary to Newaukum Creek.

Mid-Sound has operated a Coho Smolt Trap near the mouth of important tributary to Newaukum Creek each spring/summer through 2010 to 2012.

The purpose of the Coho Smolt Trap was to track juvenile coho numbers in Big Spring Creek prior to King County’s re-channelization project that will remove the creek from a low quality habitat ditch and direct it back into the historic creek channel. Information provided by the 2-way Smolt Trap survey will demonstrate how the re-channelization project has affected the Big Spring Creek juvenile salmon population in a before and after implementation of this habitat restoration project. Currently, there is no planned start date for this King

County Project.

Our smolt trap was ran primarily by volunteers, checking the trap at least twice a day (more during storm events) counting and identifying captured fish species. Our volunteers came from a variety of places, the local Enumclaw community and high school, to people from North Seattle and Duvall.

Analysis of the past 2 years' data shows significantly lower coho numbers than during a study conducted several

years ago. While there are many possible reasons for this decline, the current evidence points to a beaver dam that was constructed just about two years ago immediately upstream of our trap site. Given the sites proximity to the confluence with Newaukum Creek it is possible that upstream migration and spawning by adult salmonids has effectively been stopped during this time period. Further analysis will look at WDFW coho spawning data for Big Spring Creek, if any exists.

Region 4: Mid-Sound Regional Fisheries Enhancement Group - Financial Summary

| Project Name | RFEG Funds | Volunteer Hours | Volunteer Dollars | Other Funds | Total |
|------------------------|------------------|-----------------|-------------------|------------------|------------------|
| Administration | \$87,873 | 420 | \$8,820 | \$12,238 | \$108,931 |
| Habitat Restoration | \$26,798 | 580 | \$12,180 | \$159,428 | \$198,406 |
| Outreach and Education | \$21,127 | 120 | \$2,520 | \$22 | \$23,669 |
| <i>Totals</i> | <i>\$135,798</i> | <i>1,120</i> | <i>\$23,520</i> | <i>\$161,624</i> | <i>\$331,006</i> |



New Culvert installed at Little Brook Creek with boulder cascade stream bed constructed inside.

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REGION 5: South Puget Sound Salmon Enhancement Group



CONTACT INFORMATION

South Puget Sound Salmon Enhancement Group

Martin Way East, Suite 112

Olympia WA, 98516

Phone: (360) 412-0808

Fax: (360) 412-0809

E-mail: spsseg@spsseg.org

Website: www.spsseg.org

Mission Statement

Protect and restore salmon populations and aquatic habitat with an emphasis on ecosystem function through scientifically informed projects, community education, and volunteer involvement.

Overview

The South Puget Sound Salmon Enhancement Group (SPSSEG) is a local voice for regional salmon recovery. From the highest peaks in the Cascades, to the fertile shorelines and estuaries of South Puget Sound, SPSSEG restores salmon habitat while working with willing landowners. SPSSEG believes that by collaborating with local communities, schools and individuals in King, Pierce, Kitsap, Thurston and Mason Counties, we can increase salmon numbers in our rivers and streams. Working closely with local, state, federal, non-profit and tribal agencies, SPSSEG provides education opportunities, technical assistance, construction services and pursues grant funding to find win-win solutions for people and salmon. Our non-profit, non-regulatory, non-political, status helps SPSSEG get real results, real quick.

From July 1, 2011 to June 30, 2012, SPSSEG completed six in-stream restoration projects, conducted and/or participated in numerous education and assessment projects and have eight on-the-ground projects in progress.

A nine-member board provides technical expertise and institutional knowledge. SPSSEG has well established partnerships with tribal, federal, state and local agencies. There are four full time SPSSEG employees, one part time field and office assistant, one Washington Conservation Corps (WCC) Individual Placement and a part time Accounts Manager.

Numerous property owners, businesses, non-profits and other salmon supporters comprise SPSSEG membership. The membership is complimented by non-member donors and volunteers who contribute valuable time and money. A newsletter and annual meetings help the membership, staff and Board keep in touch with our supporters.

Project Highlight

Riparian Planting

Ohop Planting/Monitoring (In-Progress): SPSSEG is partnering with Nisqually Land Trust, Natural Resources Conservation Service (NRCS), and Nisqually Tribe to plant over 80 acres in the Ohop Valley. The plantings and monitoring will continue through 2012. WRIA 11

Elbow Lake Creek (Completed): SPSSEG has partnered with the Nisqually Land Trust, US Fish and Wildlife Service (USFWS), and National Fish and Wildlife Foundation (NFWF) to remove a culvert on an abandoned private road. The project was completed in fall 2010 and plantings and maintenance will continue through 2011. WRIA 11

Goldsborough Creek (Completed): SPSSEG partnered with Mason Conservation District and Squaxin Island Tribe to replant riparian areas near the dam removal site. The project was completed in 2011 and 2012. WRIA 14

In-stream Habitat Projects

Greenwater ELJ and Road Removal (In-Progress): The Greenwater Engineered Log Jam (ELJ) and Road Removal project, funded by Salmon Recovery Funding Board (SRFB), EPA, WA Department of Transportation

(WSDOT), and the USDA Forest Service, installed fourteen ELJ's in this clear-water tributary of the Upper White River. Construction is scheduled to continue through 2013. WRIA 10

Clearwater River Log Jams (In-Progress): SPSSEG and partners will design and install several ELJ's in the Clearwater River. Construction is scheduled for 2013. WRIA 10

Parkland Prairie (Completed): NFWF and Pierce County funded this pilot project to remove asphalt from the streambed. The banks were reshaped and wood was added to the channel for complexity. The project was completed during the summer of 2009. Monitoring will continue through 2011. WRIA 12

Gull Harbor (In-Progress): SPSSEG will partner with Capitol Land Trust and SRFB to remove a tidal barrier stand pipe and culvert. Construction is scheduled for 2012 or 2013. WRIA 13

Priest Point Park Bulkhead (In Progress): SPSSEG will partner with SRFB and City of Olympia to remove a derelict bulkhead in a City park. Construction is scheduled for 2012. WRIA 13



Placing a new bridge at Purdy Creek



Squaxin Island bulkhead and pier removal - before

Boston Harbor Road Design (Completed): SPSSEG partnered with Thurston County to design a strategic fish passage structure that will provide better connectivity to habitat. This is a design only grant funded by SRFB. WRIA 13

Allison Springs (Completed): SPSSEG partnered with the Capitol Land Trust and the City of Olympia to restore two sites in Mud Bay. Construction was scheduled for 2011. WRIA 14

Squaxin Island Bulkhead Removal (Completed): SPSSEG partnered with WA Department of Natural Resources, SRFB, and Squaxin Island Tribe to remove a creosote pier and rock bulkhead from Squaxin Island. Construction was completed in 2011. WRIA 14

Mid Way Creek (In-Progress): SPSSEG will partner with SRFB and Simpson to replace a barrier culvert on a private rail road track on Goldsborough Creek near Shelton. Construction is scheduled for 2012. WRIA 14

Case Inlet (In-Progress): SPSSEG will partner with SRFB and WDFW to remove a derelict over-water structure and bulkhead. Construction is scheduled for 2012 or 2013. WRIA 14

FFFPP Schneider Creek (Completed): SPSSEG partnered with FFFPP and a private landowner to replace a culvert with a bridge. Construction was scheduled for 2011. WRIA 14

Squaxin Island Tribe EPA (In-Progress): SPSSEG is partnering with Squaxin Island Tribe to continue projects in the Goldsborough Creek watershed. Projects are on-going. WRIA 14

McCormick Creek (In-Progress): SPSSEG will partner with SRFB and Tacoma Public Utilities to replace a culvert on an access road. Construction is scheduled for 2012.



Squaxin Island bulkhead and pier removal - after

WRIA 15

FFFPP Purdy Creek (Completed): SPSSEG partnered with FFFPP and a private landowner to replace a culvert with a bridge. Construction was scheduled for 2011. WRIA 15

Assessment, Monitoring and Research

Mashel River Effectiveness Monitoring (Ongoing): The Mashel Monitoring Project is funded by the Nisqually Indian Tribe and EPA to assist in the development of the Nisqually Basin Chinook Recovery Monitoring Plan. WRIA 11

Lower Ohop 3 Design (Completed): SPSSEG partnered with stakeholders to design the next phase of Ohop Creek restoration. The design only process was completed in 2011. WRIA 11

WRIA 14 Three Year Work Plan (In-Progress): Assessments in the WRIA 14 have been conducted by SPSSEG and other stakeholders. SPSSEG will use this information to select 10 projects and to work with many landowners to develop them into practical conceptual designs that are listed on the Lead Entity 3-year work plan.

WRIA 13 Three Year Work Plan (In-Progress): Assessments in the WRIA 13 have been conducted by SPSSEG and other stakeholders. SPSSEG will use this information to select 10 projects and to work with many landowners to develop them into practical conceptual designs that are listed on the Lead Entity 3-year work plan.

McLane Creek Assessment (In-Progress): SPSSEG will follow a successful watershed model to identify and design 10 diverse projects in this priority watershed. WRIA 13

Penrose Point Bulkhead Removal (In-Progress): SPSSEG will partner with SRFB, USFWS, and State Parks to remove a creosote and rock bulkhead. Construction is

Region 5: South Puget Sound Salmon Enhancement Group - Financial Summary

| Project | RFEG Funds | Volunteer Hours | Volunteer Value | Other Funds | Total |
|---------------------------------|------------------|-----------------|-----------------|--------------------|--------------------|
| Greenwater II | | | | \$67,437 | \$67,437 |
| WRIA 13 3-Year Work Plan | | | | \$50,001 | \$50,001 |
| WRIA 14 3-Year Work Plan | | | | \$20,639 | \$20,639 |
| Clearwater | | | | \$77,463 | \$77,463 |
| Midway Creek | | | | \$68,943 | \$68,943 |
| Case Inlet | | | | \$2,974 | \$2,974 |
| Squaxin Island Bulkhead | | | | \$11,516 | \$11,516 |
| McLane Creek | | | | \$26,794 | \$26,794 |
| Penrose Point | | | | \$39,034 | \$39,034 |
| Boston Harbor | | | | \$32,782 | \$32,782 |
| McCormick | | | | \$2,962 | \$2,962 |
| Priest Point Park | | | | \$13,737 | \$13,737 |
| Deschutes | | | | \$75,605 | \$75,605 |
| Penrose Point Bulkhead Removal | | | | \$4,137 | \$4,137 |
| Middle Goldsborough | | | | \$6,860 | \$6,860 |
| Port of Olympia - Mission Creek | | | | \$25,247 | \$25,247 |
| Anderson Island - Jacob's Point | | | | \$4,933 | \$4,933 |
| Allison Springs | | | | \$13,323 | \$13,323 |
| Gull Harbor | | | | \$1,801 | \$1,801 |
| Spurgeon Creek | | | | \$2,916 | \$2,916 |
| Gerasimczyk-Schneider | | | | \$118,025 | \$118,025 |
| Norby-Purdy | | | | \$100,348 | \$100,348 |
| Schoolhouse Creek | | | | \$12,347 | \$12,347 |
| EPA Mashel Monitoring | | | | \$2,524 | \$2,524 |
| Sequalitchew Creek | | | | \$6,394 | \$6,394 |
| Squaxin Island Tribe - EPA | | | | \$64,344 | \$64,344 |
| Titlow Beach | | | | \$1,832 | \$1,832 |
| USDA Forest Service Greenwater | | | | \$166,726 | \$166,726 |
| Elbow Lake Creek | | | | \$17,827 | \$17,827 |
| Penrose | | | | \$3,235 | \$3,235 |
| WA DOT Clay Creek-Greenwater | | | | \$10,926 | \$10,926 |
| Others <\$1000 each | | | | \$1,810 | \$1,810 |
| Generic Projects | | | | | |
| Office Operations | \$119,276 | 400 | \$8,400 | | \$119,276 |
| Project Management | \$16,468 | | | | \$16,468 |
| Project Engineering | \$291 | | | | \$291 |
| Education & Outreach | \$7,099 | | | | \$7,099 |
| Project Construction | \$- | | | | \$- |
| Kennedy Creek Salmon Trail | \$4,033 | 600 | \$12,600 | 6,937 | \$10,970 |
| <i>Totals</i> | <i>\$147,167</i> | <i>1,000</i> | <i>\$21,000</i> | <i>\$1,062,378</i> | <i>\$1,224,544</i> |

scheduled for 2012 or 2013. WRIA 15

Deschutes River (In-Progress): SPSSEG will help develop an in-stream habitat project on the Deschutes River. This is a design only grant funded by SRFB. WRIA 13

Titlow Beach (In-Progress): SPSSEG and many stakeholders including Tacoma Parks, People for Puget Sound, and Nisqually Tribe have been involved in project planning for this pocket estuary along the WRIA 12 shoreline.



Class of students visiting the Kennedy Creek Salmon Trail.

WRIA 10-14 Capacity Funds (In-Progress): SPSSEG has received funding from several Lead Entities to increase participation in the planning and installation of projects listed on their respective 3-year work plans.

Education

Kennedy Creek Salmon Trail (Ongoing): The Trail provides public access to one of the South Sound's healthiest chum salmon runs. Taylor United Shellfish has donated a 20-year land lease for a half-mile interpretive trail along Kennedy Creek. Over 50 volunteer trail guides educate school groups and visitors each year. During the 2011 season the trail had over 4,000 total visitors. SPSSEG partners with Mason Conservation District, Taylor Shellfish and Green Diamond Resources, and the Kennedy Creek Advisory Committee to organize the Trail. WRIA 14

Education and Outreach (Ongoing): SPSSEG staff, Board, and volunteers are always looking for ways to provide salmon education and outreach for our community. This year SPSSEG participated in Donkey Creek Chum Festival, Kids with Conservation Knowledge, Northwest Fly Fishing Academy, Nisqually Watershed Festival, Shore Stewards, South Sound Green, and numerous other educational and outreach events.

Generic Projects (Ongoing): Our Riparian Restoration, Office Operations, Project Management, Project Engineering, and Project Construction project funding allows SPSSEG to utilize RFEG funds for all our individual on-the-ground and education projects as well as to maintain and build our organizational infrastructure.

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Project Manager, Adam Sant

Project Manager, Kirstin Williamson

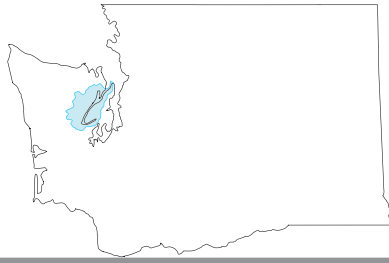
Accounts Manager, Christine Garst

Sound Non-profit Accounting

TESC Graduate Workstudy, Jerilyn Walley

Washington Conservation Corp Individual Placement,

Katie Fulkerson



REGION 6: Hood Canal Salmon Enhancement Group



CONTACT INFORMATION

Hood Canal Salmon Enhancement Group

P.O. Box 2169
600 NE Roessel Rd.
Belfair, WA 98528
Phone: (360) 275-3575 Office
Fax: (360) 275-0648
E-mail: hcseg@hcseg.org
Website: www.hcseg.org

Mission Statement

To perpetuate and enhance the genetic diversity and stocks of wild salmon in Hood Canal through the protection and restoration of salmon habitat, stewardship and research for watershed and marine ecosystems, community education and outreach, and any other means appropriate. Adopted in 1990, modified in 1999, 2002, and 2003.

Overview

The region covered by the Hood Canal Salmon Enhancement Group (HCSEG) includes all streams emptying into Hood Canal south of the Hood Canal floating Bridge. The Hood Canal region supports fall Chinook, summer chum, pink salmon, fall chum, coho, steelhead and sea-run cutthroat. HCSEG has fostered over one hundred partners at local, state and federal levels. We are proficient at extensive restoration and research projects to improving wild salmon stocks in Hood Canal.

Project Highlights

Big Quilcene River Acquisition

This acquisition provides the opportunity to revitalize this river and estuarine system by performing an additional restoration project within formally private-owned parcels. The acquisition of 18 parcels in the Big Quilcene River floodplain and estuary is anticipated to be finalized in spring of 2013. Restoration activities are scheduled for late spring of 2013 and include sea dike, fill and debris removal as well as building demolition. This project will lead to a larger area of protection for the Big Quilcene River ecosystem and represents a final component of an ecosystem-scale restoration effort of the larger Quilcene Bay estuarine complex. This project builds on over 10 years of conservation activities in this area.

Little Quilcene River

Brush Plant Road Reach Restoration – The 1/3 mile reach of the Little Quilcene River between Center Road and Highway 101 had been channelized for agriculture and residential development, resulting in one long riffle that provided neither stable spawning nor rearing habitats. This restoration effort occurred in fall 2011. It increased the quantity and quality of in-river habitat by installing five log jams to create pools and tail-outs. This project increased

stability of spawning sediments by reducing the potential for scour and improved bank stability at some exposed, eroding banks. 1,500 feet of river and 200 feet of side channels enhanced. It improved riparian vegetation by installing 1,000 native plants, removing undesirable weeds and re-seeding with turf and pasture grass over a 10 area.

Donovan Creek Restoration

Restoration actions included re-meandering approximately 3,300 feet of the channelized portion of Donovan Creek, adding approximately 15 large woody debris structures and replanting approximately 15 acres of riparian corridor along the newly meandered channel.

Lower Tahuya River LWD Placement

Phase I of this project involved helicopter placement of 72 logs in the Tahuya River at 11 locations in a 1.25 mile stretch. A helicopter was used to place these logs because the riparian area did not provide good access to the river without causing severe damage. This project restores salmonid spawning, rearing, and refuge habitat. This project is critical because of HCSEG's summer chum salmon supplementation project on this river. Phase 2 will continue large wood placement along another section of the Tahuya River in August of 2012.



Lower Tahuya River Large Wood Placement
August 2011

Union River Estuary Restoration

Final project design was selected in spring of 2011. In partnership with WDFW, Recreation and Conservation Office (RCO) and USFWS, we are working to restore 52 acres of previously filled estuarine habitat. This project is important for juvenile salmon, which are tiny when they out migrate and need shallow, protected waters to seek refuge from predators and strong currents.

Estuaries provide areas where juveniles and adults can slowly transition from saltwater to freshwater and fresh to saltwater. This project results in the last significant estuary restoration in the lowermost part of the Hood Canal. Phase 1 of this project begins September of 2012.

Knotweed Control and Riparian Enhancement

Since 2009, HCSEG has been surveying and treating Knotweed. Knotweed is an extremely aggressive, non-native plant that was imported from Asia as a garden ornamental. It smothers native species, lowers habitat biodiversity and degrades bank stability. This fiscal year, HCSEG surveyed and treated knotweed on the Union, Dewatto and the Tahuya Rivers. In 2010, over 61 acres were treated. In 2011, the acres treated was reduced to less than 25. Eradication of this invasive weed is successful due to vigilant treatment and monitoring.

Through the help of East Jefferson Conservation Corp., Knotweed was treated on the Big and Little Quilcene Rivers. Knotweed is treated using an aquatic use formulated herbicide by licensed HCSEG personnel. Knotweed treatments are followed with monitoring and resurveying to assess effectiveness. Re-treatment of past knotweed stands continue until eradication. After treatment, replanting riparian areas with native species is ongoing. In 2011, the Union River was replanted with 1,300 conifers and 1,200 deciduous trees.

The Dewatto Nutrifcation Study

In its twelfth year, this study determines the potential populations of juvenile coho in eight tributaries of the Dewatto River and if they can be self-sustaining based on available habitat. The project includes adult coho spawner surveys, 8 smolt traps, macro-invertebrate sampling, marine derived nutrient sampling, pool riffle surveys, carcass-analog distributions and transport and statistical analysis. This study evaluates the significance of marine-derived nutrients to the health of a watershed by monitoring the populations of macro invertebrates (aquatic bugs) and juvenile fish.

Three of the eight tributaries are test streams that received extra nutrients in the form of carcasses or carcass analogs. All tributaries are monitored to assess the benefits of additional marine derived nutrients. Each spring, temporary smolt traps are installed near the mouth of each tributary. The traps catch juvenile fish migrating to salt water. Volunteers and staff weigh and measure the smolts. Macro invertebrate data is collected during the summer and used as an index to evaluate the health of the stream.

Each fall, volunteers and staff conduct weekly spawner surveys to estimate adult coho salmon return. Samples of juvenile coho are collected from each stream during the summer months. These fish are sent to a laboratory for marine derived nutrient analysis to measure the levels of Nitrogen Isotope 15 in each tissue sample. The data is used to compare levels of marine derived nutrients found between test and control streams.

Results show that the test streams contain higher averages of marine derived nutrients in tissue after carcasses and/or carcass analogs have been added to the test streams. These findings appear to substantiate the need for nutrification to streams for salmon population sustainability.

The Union River/Tahuya Summer Chum Project

This project completed its twelfth year partnering with WDFW George Adams Hatchery in the fall of 2011. The project’s achievement of reaching sustainable levels of summer chum, an ESA listed species, in the Union River has enabled reintroduction of summer chum to the Tahuya River system. The Union River is one watershed south of the Tahuya River, allowing for viable donor stock of summer chum. Supplementation efforts began in 2000. Each year since 2003, brood stock is collected in the Union River and the resulting fry are raised for release in the Tahuya system the following spring.

Since 2000, an adult fish trap on the Union River is installed every fall to count returning adults and provide brood stock. It is manned by volunteers twenty-four hours per day. The table below lists returning numbers of summer chum to the Union River:

| <i>Year</i> | <i>Count</i> | <i>Year</i> | <i>Count</i> |
|-------------|--------------|------------------------|--------------|
| 2000 | 743 | 2007 | 1,967 |
| 2001 | 1,486 | 2008 | 1,144 |
| 2002 | 872 | 2009 | 611 |
| 2003 | 11,916 | 2010 | 967 |
| 2004 | 5,971 | 2011 | 276 |
| 2005 | 1,987 | 2012 | 2,143 |
| 2006 | 2,836 | <i>(as of 9/27/12)</i> | |

During the fall, nineteen pairs of Union River summer chum were collected at the Union River trap. Union River fry were raised for spring release into the Tahuya system. Half of the eggs were kept at the George Adams Hatchery as a precautionary measure and half were raised at the rearing site on Tributary 9 of the Tahuya River. Approximately 25,000 summer chum fry were released

into the Tahuya River system in February and March.

After spawning, samples are taken from the brood stock including: ovarian, kidney, and spleen for detecting viruses; scale samples for age; heart, liver, body and eye tissue for GSI (Genetic Stock Identification) data; and gill plate samples for DNA analysis and GSI. Volunteers record the species and sex of each fish before releasing them upstream and assist with trap maintenance, public outreach, spawning preparation and trap security. Volunteers logged 2,279 hours of service at the trap site during the 2011 trapping season.

Additionally, crews conducted spawner surveys on the Tahuya River which include otolith sampling, gill plate sampling for DNA analysis and scale sampling. The summer chum return was estimated at 150 between August and September of 2011. Re-population efforts of summer chum on the Tahuya River are being realized through HCSEG’s supplementation efforts. Rearing of summer chum fry will continue through the winter of 2012-2013 with subsequent release in the Tahuya system in spring of 2013.



HCDOP water sampling - January 2012

The Hood Canal Dissolved Oxygen Program

HCSEG has been collecting marine data for the Hood Canal Dissolved Oxygen Program (HCDOP) since 2003 and has co-managed the Integrated Assessment and Modeling (IAM) portion of the science program since 2005. The funding for HCDOP-IAM ended in 2010. The summary report was released at that time. The report has been peer reviewed by scientists and is currently being evaluated by WDOE and the U.S. EPA with respect to potential water quality regulations. Through 2011, HCSEG continued monthly marine sampling cruises in

support of the network of oceanographic moorings in Hood Canal and to maintain the long-term dataset for tracking DO concentrations related to hypoxia and fish kill events.

Hood Canal Steelhead Project

This project aims to rebuild steelhead populations in the Duckabush, Dewatto, and Skokomish Rivers while testing the effects of hatchery supplementation on natural populations. The Tahuya River, Big Beef Creek and Little Quilcene River are control streams to test for differences between supplemented and non-supplemented populations. This project is led by NOAA Fisheries and is contributed to by WDFW, Long Live the Kings Institute, the Skokomish Tribe, HCSEG, USFWS, USFS, and the Port Gamble S'Klallam Tribe. HCSEG's focus is to carry out work on the Dewatto, Tahuya and Little Quilcene Rivers. Field work includes redds surveys, embryo collections, fish releases and out-migrant juvenile trapping. Redd counts are used to track adult steelhead abundance. Naturally spawned embryos are collected from some of the observed redds. The progeny are captively-reared - most are released as 2 year smolts while some are released as adult fish to naturally spawn. The estimated spawner abundance was slightly up in the Tahuya River (68 in 2010, 47 in 2011, 78 in 2012) and above pre-supplementation levels in the Dewatto River (13 in 2010, 92 in 2011, 55 in 2012). Trapping of out-migrating juvenile fish occurred throughout April and May. Data and tissue samples are used to monitor juvenile abundance, genetic diversity and life history characteristics. These characteristics will be tracked over the 16-year study in both supplemented and control populations to determine whether changes take place as a result of hatchery supplementation.

West Sound GreenSTEM & Environmental Explorations

Over 400 students from 11 schools in the Hood Canal watershed participated in the West Sound GreenSTEM program. A culminating GreenSTEM Summit was held on May 31st and June 1st, 2012, for these students to present their classroom projects. Student project topics were varied and included development of a nature trail, discussion of the Union River Estuary project, set-up of school-wide composting and/or worm bins, school rain garden creation and water quality monitoring. Additionally, Environmental Exploration activities were presented by our EcoNet partners in Mason and Kitsap County. These included presentations of eco-friendly gardening, native plant id, noxious weed id, micro plastics, stream bug identification, honey bee science and construction of greenhouse panels

using recycled pop bottles. Students participated in the Washington NatureMapping Program at this summit.

Adventure Salmon Camp

Adventure Salmon overnight camp was held for 5th through 9th graders in two sessions in July and August. Young people explored Hood Canal's watershed while gaining knowledge of the salmon life cycle and salmon related issues. Activities included: Kayaking the Rendsland Creek Estuary in Tahuya; Snorkeling, swimming and identifying benthic macroinvertebrates; A visit to the Skokomish watershed and the estuary restoration project was covered; A Tribal Elder lead tour of the Port Gamble S'Klallam Tribal Center. The influence of salmon to the culture of the northwest was portrayed throughout the camp session.



Adventure Salmon Camp
Summer 2011

Boys & Girls Club Nature Camp

HCSEG partnered with the North Mason and South Kitsap County Boys & Girls Club to provide summer nature day camps. Through this partnership, with funding through the Tauck Foundation, HCSEG held three separate and unique day camp programs. Participants spent a day exploring the marine waters of Hood Canal by collecting and identifying phytoplankton while on board the research vessel Indigo. On a day at the Farm At Waters Edge, campers learned about eco-friendly farming and examined bird field marks while playing a binocular relay game. Campers explored forested areas through nature walks with a compass and map game. The third day was spent at the Hamma Hamma River where participants played the Elk and Wolf game (a predator/prey game), explored the estuary, river and uplands of the Hamma Hamma learning the significance of these systems. These

nature day camps were a success thanks to staff, volunteers and community partners including the Robbins Family, and the Indigo crew and Sea Fleet, LLC (SEA).

StreamTeam Internship Program

This Internship program is awarded to graduating Hood Canal region high school students who will attend a two or four year college or university and major in environmental science, fisheries, biology, ecology or a related field. This paid internship requires a 400 hour commitment during the summer. Applicants are eligible to participate in the program for up to four years.

In the summer, three paid StreamTeam internships were awarded. StreamTeam Interns conduct stream surveys on the tributaries of the Tahuya and Dewatto River systems and gather data along the entire length. Working together, the interns fulfill many tasks including measuring gradient, stream and channel width, pool depth and surface area, and counting and measuring LWD. They collect benthic macroinvertebrates for the Dewatto Nutrifcation project.

Scholarships

During fall of 2011, HCSEG awarded three \$2,500.00 scholarships to college students who were selected to participate in the StreamTeam Internship program and successfully completed their 400 hour commitment during

the summer of 2011.

Research Interns

From July 2011 - June 2012, HCSEG provided five research internships to college students pursuing degrees in the natural sciences. Research Interns participate as field technicians for the previously mentioned research projects. This is an excellent opportunity for college students to gain field experience and earn college credit. These internships are typically offered quarterly and require a commitment of 100 hours. Upon completion Research Interns are awarded a small stipend.

Community Outreach

HCSEG staff and interns participated in community outreach and education at over 20 local schools, clubs and regional events.

Pacific Northwest Salmon Center

In January of 2012 the merger of the HCSEG and PNWSC occurred. Both organizations are under one roof called the Pacific Northwest Salmon Center. The Salmon Center encompasses the Research and Education arm of the group while HCSEG encompasses all restoration activities. We are also broadening our horizons through the Farm at Water's Edge education programs where we are working to show the link between sustainable, organic farming practices and healthy salmon ecosystems.

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Kimberely Gower

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Education Coordinator/Volunteer Coordinator,

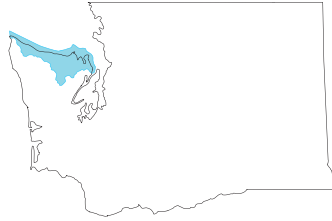
Michelle Myers

Maintenance Technician, Don Husted

Field Technician, Daniel Heide

Region 6 - Hood Canal Salmon Enhancement Group - Financial Summary

| Project Name | RFEG Funds | Volunteer Hours | Volunteer Dollars | Other Funds | Total Spent |
|---|---------------------|-----------------|---------------------|-----------------------|-----------------------|
| WDFW 11-1046 | \$104,904.54 | | | | |
| Tahuya River Summer Chum Restoration | | | | \$7,999.75 | \$7,999.75 |
| USFWS 13410-A-J002 | | | | \$1,117.17 | \$1,117.17 |
| USFWS 13410-B-J004 | | | | \$97,402.62 | \$97,402.62 |
| Lower Big Beef Creek Design | | | | \$3,930.00 | \$3,930.00 |
| Big Quilcene ELJ - Phase. 1 | | | | \$1,587.90 | \$1,587.90 |
| Big Quilcene River ELJ Restoration II | | | | \$21,628.10 | \$21,628.10 |
| Big Quilcene Estuary Acquisition & Planning | | | | \$21,043.16 | \$21,043.16 |
| Little Quilcene Brush Plant Road Reach | | | | \$105,272.00 | \$105,272.00 |
| Little Quilcene Brush Plant Road | | | | \$96,000.00 | \$96,000.00 |
| City of Gig Harbor Donkey Creek Design | | | | \$20,000.00 | \$20,000.00 |
| Donovan Creek Acquisition and Restoration | | | | \$130,000.00 | \$130,000.00 |
| Jefferson Land Trust, Donovan Creek Restoration | | | | \$312,290.38 | \$312,290.38 |
| Pacific Education Institute, GreenSTEM | | | | \$2,623.00 | \$2,623.00 |
| UW/APL, HCDOP | | | | \$10,000.00 | \$10,000.00 |
| Health of Hood Canal, HCDOP | | | | \$214,509.00 | \$214,509.00 |
| Klingel Estuary Restoration | | | | \$4,956.33 | \$4,956.33 |
| Knotweed Control Union & Dewatto | | | | \$90,074.14 | \$90,074.14 |
| Knotweed Control & Riparian Enhancement | | | | \$14,788.56 | \$14,788.56 |
| Invasive Knotweed Control | | | | \$25,208.00 | \$25,208.00 |
| Richert Skokomish | | | | \$3,255.00 | \$3,255.00 |
| Steelhead Research Project | | | | \$6,000.00 | \$6,000.00 |
| Little Quilcene Juvenile Salmon Trap | | | | \$14,600.00 | \$14,600.00 |
| Tahuya Large Wood Placement | | | | \$96,000.00 | \$96,000.00 |
| Lower Tahuya LWD Placement | | | | \$91,474.91 | \$91,474.91 |
| Union Estuary Dike Design | | | | \$19,636.76 | \$19,636.76 |
| Adventure Salmon Camps 2011 | | | | \$3,900.00 | \$3,900.00 |
| Volunteer Hours July - Sept, 2011 | | 4050.25 | \$85,055.25 | | \$85,055.25 |
| Volunteer Hours Oct - Dec, 2011 | | 665.25 | \$13,970.25 | | \$13,970.25 |
| Volunteer Hours Jan - Mar, 2012 | | 597.5 | \$12,547.50 | | \$12,547.50 |
| Volunteer Hours, Apr - Jun, 2012 | | 1797.5 | \$37,747.50 | | \$37,747.50 |
| <i>Totals</i> | <i>\$104,904.54</i> | <i>7110.5</i> | <i>\$149,320.50</i> | <i>\$1,415,296.78</i> | <i>\$1,564,437.28</i> |



REGION 7: North Olympic Salmon Coalition



CONTACT INFORMATION:

North Olympic Salmon Coalition

205 B West Patison Street
Port Hadlock, WA 98339
Phone: (360) 379-8051
Fax: (360) 379-3558

E-mail: rbenjamin@nosc.org

Website: www.nosc.org

Mission Statement

The mission of the North Olympic Salmon Coalition is to restore, enhance and protect habitat of North Olympic Peninsula wild salmon stocks and to promote community volunteerism, understanding, cooperation and stewardship of these resources.

Overview

As a non-profit, community-based salmon recovery organization, North Olympic Salmon Coalition (NOSC) provides funding, guidance, technical assistance and ongoing support for salmon habitat restoration and enhancement. Our region includes the watersheds along the coast of the Strait of Juan de Fuca, extending from the Hood Canal Bridge west to Cape Flattery. We partner with a variety of agencies, tribes, schools, community organizations, volunteers and landowners to work on key areas of wildlife habitat in Morse, Snow-Salmon, Salt, Clallam and Chimacum Creeks and the rivers of the Western Strait of Juan De Fuca. Project areas include creek, river and nearshore ecosystems.

NOSC participates in the Salmon Recovery Funding Board processes through two lead entities - the Hood Canal Coordinating Council Lead Entity and the North Olympic Peninsula Lead Entity. NOSC's priority watersheds are Morse Creek in WRIA 18 and the variety of rural watersheds in WRIA 19. The Salmon-Snow watershed in Discovery Bay is our action priority in the Hood Canal Coordinating Council Lead Entity. The Regional Recovery Plan for Hood Canal and Strait of Juan de Fuca Summer Chum is lead by HCCC who looks to NOSC and the rest of the "Chumsortium" as the local outreach partners to develop community support for recovery of ESA listed summer chum in these watersheds.

Project Highlights

Project Development

Maynard Nearshore Restoration Design

Design drawing and construction specification were complete in 2012 for restoration activities within the Maynard Nearshore. The goal of this project is to restore a naturally functioning estuary and shoreline including beaches and marine riparian areas, critical habitat for ESA listed summer

chum salmon and steelhead, coho salmon, cutthroat trout, as well as numerous other fish and wildlife species such as Olympia oysters, birds and forage fish. The site is an important nearshore link to the 2008 Salmon Estuary wood waste removal project. NOSC has secured about 75% of the funding needed to begin construction with several grant asks pending to close the gap.

Kilisut Harbor Restoration Design

NOSC is seeking design funding for a project that will recreate over 14 acres of historic tidal channels and reconnect a salt marsh linkage between southern Kilisut Harbor and Oak Bay to restore self-sustaining ecosystem processes to approximately 2,300 acres of highly productive salmonid habitat in Kilisut Harbor. These actions will re-establish a major northern and southern migratory passage in an area of superb nearshore habitat between Kilisut Harbor and Oak Bay for juvenile and adult salmonids, including ESA listed Hood Canal summer Chum, Puget Sound Chinook and Puget Sound Steelhead.



Morse Creek winter log jam

3 Crabs Nearshore Restoration Design

NOSC is seeking design funding to restore the 3 Crabs nearshore and estuary, a coastal inlet connected to the Dungeness River Estuary by Meadowbrook Creek. When implemented, the proposed restoration actions will help recover lost Dungeness River Delta services by restoring freshwater input, tidal flow and sediment transport within Meadowbrook Creek, the Dungeness River Delta and Dungeness Bay by removing armoring, fill and infrastructure and realigning a hydraulically restrictive road.

Perseverance Creek/Sadilek Property, Fish Passage Improvement Project

NOSC worked with private landowners to develop project funding applications to remove two undersized culverts and install a bridge that would improve fish access to a 16 acre forested wetland on the Sadilek Property. NOSC has received funding from the FFFPP program to construct a bridge which will allow juvenile coho salmon, steelhead and cutthroat trout unimpeded access to critical winter rearing habitat. This will increase juvenile productivity and survival within the watershed. The project is scheduled for construction in September 2012.

Salt Creek Estuary Design/Construction

NOSC is working to complete design on a dike road improvement project to provide tidal flooding to 20 acres of historic salt marsh currently nearly completely cut off from tidal inputs. The project would put one or multiple crossings in a road serving 25 parcels. Currently design is in the conceptual phase. Construction of the project is partially funded.

Riparian Planting and Maintenance

NOSC contracted its third Washington Conservation Corps (WCC) crew in 2011. The crew's focus is on riparian projects across East Jefferson County through partnerships with the Jefferson County Conservation District, Hood Canal Coordinating Council, Jefferson Land Trust, Jefferson County Noxious Weed Board and our RFEG Partner to the south, the Hood Canal Salmon Enhancement Group. In 2012, the crew planted over 26,571 trees. Of these, 11,750 were planted by NOSC volunteers at NOSC sites with assistance from the WCC Crew. The remaining trees were on partner organization sites. The crew also controlled invasive species and maintained plantings on over 64 acres of riparian habitat and installed ten in-stream habitat structures at Jimmycomelately Creek.

Volunteers from Jefferson Land Trust, WSU Water / Beach Watchers, WCC and local schools are valuable partners on these riparian planting projects. Many volunteer hours were logged in riparian plantings and site maintenance on Chimacum Creek, Chimacum Beach, Salmon Estuary, Discovery Bay, Salmon and Snow Creeks and Morse Creek this fiscal year. NOSC staff and volunteers continue to maintain a plant nursery on donated farmland in Jefferson County. This nursery holds 800 native trees and shrubs.

In-stream Habitat Projects

Salt Creek Large Woody Debris Project

NOSC partnered with the Lower Elwha Klallam Tribe to provide outreach and project management support to the local community in preparation for large woody debris treatment. The project was implemented in August 2011 resulting in LWD placement over ½ mile of stream on 4 private parcels.

Estuary and Nearshore

Chimacum Beach

NOSC continued beach restoration efforts at this site with plantings and site maintenance. Invasive weed removal continued this year with a focus on eradication of sweet white clover (*Melilotus alba*). Local volunteers assisted with these efforts.

Fish Enhancement

Previous efforts to restore ESA listed summer chum in Salmon and Chimacum Creeks have been successful. Supplementation began in 1999 and ended with the 2010 brood year, so program fish will be returning through 2015. NOSC continues to monitor these populations with WDFW assistance to evaluate long-term success. 2011 spawner returns for Chimacum Creek reached 634 adults and over 1,900 in 2010. As part of the supplementation program, monitoring of returning summer chum salmon on Jimmycomelately Creek. Monitoring includes set up and operation of a temporary trap to identify, count and sex the fish and then pass them upstream to spawn in the wild. Volunteers help with this as well as collect scales, DNA and otoliths to determine ages and identify program fish in order to evaluate fry-to-adult survival rates for the program fish. Monitoring evaluates the contribution of natural origin fish to the total run. Survival rates have met and exceeded program goals. The 2011 return was



Ryan & First Salmon Creek - August 2012

2,411 adults of which 34% (approximately 820) were from natural origin, indicating that the restored habitat is supporting a sustainable number of fish. Monitoring the trap has become a great opportunity for outreach and education to family, friends, neighbors and those passing by on the Olympic Discovery Trail. This program was adopted by NOAA as part of the 2007 Summer Chum Salmon Recovery Plan.

Monitoring

Fish Monitoring

Spawning surveys for summer chum and coho took place with volunteers in the Chimacum watershed in cooperation with WDFW. NOSC volunteers provide extensive volunteer labor support for the WDFW Snow Creek Coho Recovery Program; a research based broodstock and RSI effort using multiple rearing and release strategies in the Discovery Bay watershed. NOSC volunteers attended adult traps at Jimmycomelately and Salmon Creeks and walked Chimacum Creek counting summer chum and collecting otoliths, scales and tissue samples for DNA and identification analysis.

Salmon Creek Estuary Restoration Monitoring

With the help of NOSC volunteers, post-project



Salmon Creek Estuary Fyke netting

construction monitoring continued on Salmon Creek Estuary until June of 2012. NOSC volunteers assisted staff in monitoring vegetation, fish utilization, sediment accretion, and channel evolution at the 2008 estuary restoration site.

Morse Creek Riverine Restoration Monitoring

Post-project construction monitoring began on Morse Creek to observe changes that occurred one year after project completion. NOSC followed monitoring protocols

outlined in the ‘Morse Creek Baseline Report’ which was developed specifically to describe recommended tasks for monitoring the overall health of the Morse Creek Riverine System in regards to work completed with the project. This comprehensive plan includes protocols developed to monitor fish utilization (with snorkel surveys), thalweg development, habitat changes, LWD recruitment, and channel morphology.



Blue Heron 4th Grade students with huge blackberry wrestled from the ground

Administration

Administrative work includes management of staff, board support and a portion of overhead expenses associated with keeping two offices, eight employees and a six person field crew operating effectively. Funds are used to participate in regional and state level processes related to salmon recovery in order to identify opportunities for NOSC to advance salmon recovery goals and ensure appropriate representation. Administration includes participation in RFEG program meetings.

Community Outreach and Education

Volunteers and Outreach

NOSC continued to provide education and training for volunteers for our monitoring and riparian projects. NOSC provided watershed, storm water and salmon ecology educational opportunities to Chimacum Middle School 4th through 6th grade classes, Chimacum PI Program, Grant Street Elementary School, Blue Herron 4th grade students, Jefferson Community School, Port Angeles Franklin Elementary School’s Multi-Aged Community Program, Sequim Middle and High Schools, Crescent High School in Joyce and the North Olympic Skills Center.

This school year every 6th and 8th grader at Chimacum

Middle School received a classroom lesson on benthic macroinvertebrates. They made predictions about the health of Chimacum Creek by studying live insects that they identified using keys and dissecting scopes. Those 100 students also experienced the Snow Creek Watershed in Discovery Bay first hand by planting trees. In the 2011-2012 school year, NOSC visited 42 classrooms and reached over 1,385 students. NOSC attended eight local festivals in Jefferson and Clallam Counties to teach residents about the importance of salmon and habitat restoration. NOSC continues to foster new partnerships. This year, they put on the first ‘Salmon Celebration’ festival in May 2012. NOSC presented to four different community groups who requested information about watershed stewardship. NOSC continued its general outreach efforts through publication of newsletters and a new e-newsletter, creation and maintenance of its new website, a brochure and stickers.

North Olympic Peninsula Skills Center at Morse Creek

NOSC worked with alternative high school students from the North Olympic Peninsula Skills Center’s Natural Resource classes to teach them about different types of stream restoration activities and their ecological benefits. Students helped plant native trees along Morse Creek and also practiced creating geographic information systems to track changes in the stream’s morphology.

Stormwater Pollution Prevention Program

NOSC received a second year of funding to run their Stormwater Education Program during the 2011-2012 school year. The program consisted of delivering stormwater pollution education programming to 839 K-12th grade students at five schools. After gaining understanding of watershed and storm water, students received a blank map of their school and surrounding area and worked together to create a legend of potential stormwater pollutants, then went outside to see if they could find any. After drawing their findings on their maps, students brainstormed ways to reduce the stormwater pollution. The program concluded with a trash pickup and storm drain marking session around the school’s neighborhood. The program brought in 312 Students and community volunteers to mark 52 storm drains around East Jefferson and Clallam County’s.

FIN the Giant Salmon

FIN is the 25-foot-long, 2 ton female chum salmon sculpture that NOSC brings to schools and festivals around the region. Youth and adults can climb inside FIN to view a mural of a Pacific Northwest watershed complete



75 volunteers who helped with the Snow Creek planting.

with over 100 different native plants and animals. This year NOSC brought FIN to Grant Street Elementary as part of their Salmon in the Classroom program. FIN made it to many other parades, festivals and events around Puget Sound and even in Eastern Washington. FIN can be rented for outreach events.

Adult Education

The WSU Beach Watchers of Jefferson County spent time with NOSC learning about salmon, their habitat needs and types of restoration in spring 2012. They visited restoration sites in Discovery Bay. Gardeners and plant lovers attended the 5th Annual Native Plant Workshop offered by WSU, JCCD and NOSC in January 2012 and

learned detailed information about individual native plants available to plant in their backyards. NOSC also offered educational talks at every tree planting and monitoring event in 2011 and 2012, including plant and smolt ID, stream hydrology and stewardship conservation.

ECONet Strategic Planning and “Puget Sound Starts Here Campaign”

The WCC Intern attended trainings put on by the Puget Sound Partners to facilitate Strait ECO-net’s strategic planning process. A strategic plan will allow NOSC and its partners to work together more efficiently which will encourage education and outreach for all ages in the Strait of Juan de Fuca.

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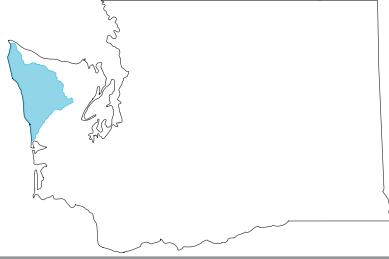
Staff

Executive Director, Rebecca Benjamin
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Volunteer and Outreach Coordinator, Jac Entringer
Administrative Assistant, Nancy Erreca
AmeriCorps Intern, Aliina Lahti
Project Manager, Kevin Long
Assistant Project Manager, Jamie Michel
Finance Manager, Randy Pendergrass
WCC Crew Members

Owen French (Crew Supervisor), Sam Erman (Assistant Supervisor), Carrie Clendaniel, Jayde Rector, Elija Roulst, Warren Young

Region 7 - North Olympic Salmon Coalition - Financial Summary

| Project Name | RFEG Funds | Volunteer Hours | Volunteer Dollars | Other Funds | Total Spent |
|---|------------------|-----------------|-------------------|------------------|------------------|
| Project Development | | | | | |
| Snow Creek Estuary - Discovery Bay | | | | \$119,975 | \$119,975 |
| Maynard Nearshore - Discovery Bay | | | | \$119,173 | \$119,173 |
| Snow/Salmon Railroad Grade Removal | \$3,400 | | | | \$3,400 |
| Salt Creek LWD | \$1,680 | 15 | \$315 | | \$2,010 |
| Kilisut Harbor Reconnection | \$3,456 | | | | \$3,456 |
| 3 Crabs Nearshore Restoration | \$5,760 | | | | \$5,760 |
| Salt Creek Estuary | \$200 | | | \$65,301 | \$65,501 |
| Sadilek culvert replacement | \$3,200 | 6 | \$126 | \$3,273 | \$6,605 |
| Other landowner projects, lead entity, RFEGC initiatives | \$13,138 | | | | \$13,138 |
| Restoration & Monitoring: Riparian Planting & Maintenance | | | | | |
| Nursery | \$600 | 40 | \$840 | \$4,510 | \$5,990 |
| Morse Creek planting & maintenance | \$200 | 239.5 | \$5,032 | \$43,314 | \$48,785 |
| East Jefferson County - riparian & marine riparian planting & maintenance | \$3,400 | 45 | \$945 | \$35,817 | \$40,207 |
| Bishop's planting | \$100 | 13.5 | \$284 | \$3,004 | \$3,401 |
| Salmon Estuary Riparian scotch broom removal | \$288 | 16 | \$336 | | \$640 |
| Snow Creek planting | \$300 | 1005.75 | \$21,131 | \$52,716 | \$75,153 |
| Restoration & Monitoring: Fish Enhancement | | | | | |
| Summer Chum Supplementation (JCL Hatchery) | | 247 | \$5,189 | | \$5,436 |
| Restoration & Monitoring | | | | | |
| Chimacum Creek Coho surveys | \$390 | 187.75 | \$3,945 | | \$4,522 |
| Chimacum Creek Chum surveys | \$350 | 121 | \$2,542 | | \$3,013 |
| Salmon Estuary post-project monitoring | \$1,000 | 205 | \$4,307 | \$10,683 | \$16,195 |
| Salmon Creek summer chum fish trap | | 405 | \$8,509 | | \$8,914 |
| Snow Creek coho recovery | | 380.5 | \$7,994 | | \$8,375 |
| Pitship vegetationo monitoring | | 8 | \$168 | \$16,731 | \$16,907 |
| Morse Re-Meander post-project monitoring | \$117 | 116 | \$2,437 | \$35,741 | \$38,411 |
| Maynard forage fish survey | \$400 | 20.5 | \$431 | | \$851 |
| Administration | \$50,639 | 359.5 | \$7,553 | \$14,140 | \$72,692 |
| Education & Outreach | | | | | |
| Outreach | \$16,540 | 272.5 | \$5,725 | | \$22,538 |
| Education | \$16,540 | 18 | \$378 | \$11,074 | \$28,010 |
| <i>Totals</i> | <i>\$121,698</i> | <i>3,722</i> | <i>\$78,189</i> | <i>\$535,452</i> | <i>\$739,060</i> |



REGION 8: Pacific Coast Salmon Coalition



CONTACT INFORMATION

Pacific Coast Salmon Coalition

PO Box 2527

Forks, WA 98331

Phone: (360) 374-8873

Fax: (978) 359-0478

E-mail: pacsac@olyopen.com

Website: www.cohosalmon.com

Mission Statement

The Pacific Coast Salmon Coalition is a regional fisheries enhancement group actively involved in local volunteer-based habitat restoration to achieve a healthy salmonid resource within our region.

Vision Statement

We envision a restored environment that maintains a healthy self-sustaining salmon and steelhead population.

We envision having a salmon and steelhead resource we can utilize and enjoy far into the future.

We see a local community that not only utilizes the resource but one that takes responsibility and is actively involved in the well being of that resource.

We envision a strong working relationship with all relevant entities that have a vested interest in salmon and steelhead habitat restoration.

Overview

The coverage area for the Pacific Coast Salmon Coalition (PCSC) includes the western portion of the Olympic Peninsula north of the Chehalis River drainage and south of Cape Flattery. There are several significant rivers in this region including the Sol Duc, Calawah, Dickey and Bogachiel - Quillayute River complex, the Hoh River, the Queets River and the Quinault River. These rivers are glacial fed and have short, but steep drops to ocean. High levels of precipitation characterize the region and streams with cold water, high average flows, and relatively long duration peak flows, including a second peak later in the year from snow melt.

Much of this area is within the Olympic National Park and Olympic National Forest, the state Experimental Forest or one of several Native American reservations. The majority of the land base in the river drainage is in timber production. The remaining land base is primarily a mixture of National Park and Native American Reservation.

One of the challenges is obtaining volunteers in a very large area with a very low population. The challenges for volunteers are to

blend the needs of salmon with an economic dependence on logging and fishing. Because so much of the region is in public land, their efforts must be coordinated with various state, federal and tribal land managers.

Several beneficial partnerships have formed because of this unique circumstance. The Pacific Coast Salmon Coalition has formed partnerships with the Quillayute Tribe, the Hoh Tribe, the Makah Tribe, Quinault Tribe, USDA Forest Service, National Park Service, WDFW, DNR, Forks School system, Rayonier, Green Crow, Blodell, the City of Forks and numerous small private landowners.



PSCS, WDFW and volunteers moving trout from Bogachiel Hatchery

Project Highlights

PCSC in conjunction with the Bogachiel and the Sol Duc River Salmon Hatcheries enhance the food chain for salmon with the Quillayute Nutrient Enhancement project.

The Sol Duc, Bogachiel, Calawah and Dickey rivers were enhanced with nearly 11,000 surplus salmon carcasses dispersed by volunteers, using their own vehicles, in almost 700 hours of volunteer service. Hatchery personnel gather and spawn the fish necessary for next years run. Several thousand food-quality salmon are collected for food banks, senior centers and tribal centers. Volunteers filleted and delivered almost 1,000 fish to local food banks donating 375 hours.

The remaining salmon are too old for food banks. These salmon are collected, their tails removed for identification as hatchery fish. Volunteers assist hatchery employees to place the fish into river systems. As the fish decay, they release nutrients that make there way up the food chain.

Aquatic insects such as caddis flies, stoneflies and midges feed on these coho salmon carcasses. Aquatic insects are an important part of a Coho fry's diet.

Salmon have five life stages; eggs, fry, smolt, adult and carcasses. After we put these carcasses in streams, they deposit marine derived nitrogen, carbon, and phosphorous. Juvenile coho, steelhead and cutthroat in small streams obtain 25% to 40% of these elements from coho salmon carcasses. Besides feeding on aquatic insects, coho fry have been seen feeding directly on carcasses. Salmon are called a "keystone" species as they have a positive impact on 138 species of wildlife in Washington and Oregon. WDFW, Rayonier USDA Forest Service Olympic Region and DNR are important partners in this project.



Coho salmon at Sol Duc Hatchery prepared for Nutrient Enhancement

Borde Pond RSI

The Borde Pond project is a Remote Site Incubator (RSI) project on with the intent of to augment an existing coho run in Mill Creek. Borde pond is a supplementation project being done in partnership with a private landowner and WDFW that has been active for several years. In 2011-2012, we released 3,800 juvenile coho from Borde Pond RSI.

The Camp Creek project

This project replaced a culvert on a Sol Duc River tributary in Clallam County. Currently the culvert is perched 10 feet in an ordinary high water channel width of 20 feet with a wetted width of 15 feet wide. The culvert is in immanent failure. The bottom of the culvert has rusted out, leaving a sharp, jagged raceway for salmon to navigate. There is approximately 6 foot of fill over the culvert to the road. Should this culvert fail, the sedimentation input would be detrimental to the lower reaches of the stream.

Camp Creek offers spawning and rearing habitat for coho, Chinook, trout & refuge for sockeye in the lower reaches. The habitat above is described by WDFW and USFS as fair with the habitat below being excellent. PCSC will remove the undersized culvert and fill material and replace it with a 70 foot bridge, opening nearly 1.5 miles of spawning and rearing habitat and reconnecting an important salmon stream. This summer the project was surveyed, designed and materials were stockpiled on site, with construction slated for 2012. Camp Creek is a cooperative project with Merrill & Ring, the landowner.

Hoh Knotweed Survey

The Hoh Knotweed Survey project's objective is the complete eradication of invasive Bohemian and Giant knotweed to preserve and restore the Hoh River's riparian forests. Which will maintain the ecosystem services they



Staff, volunteers and DOC crew putting fascia on the Elk Creek "Ed Shed"

provide to the river. Knotweed rapidly and completely disrupts natural succession in riparian forests, disrupting or eliminating critical habitats that support native species such as the Hoh River's wild salmon, steelhead and bull trout. The Hoh River watershed is famous for recreational fishing and boating. It supports tribal and non-tribal subsistence and commercial fisheries.

The project covers 30 miles of the Hoh River floodplain in west Jefferson County, from the point of original infestation at a homestead, downstream to the river's mouth at the Pacific Ocean. After nine years of surveys and treatment, the Hoh knotweed infestation has been reduced to a sparse but widely dispersed population. Of 108 plant sites observed in 2010, the majority were less than three foot high and only one to two stems.

Data informs scientists about this species' ecology



Trees felled in Solberg Creek to recruit gravel and increase pools

and effectiveness of control strategies. This data educates policy-makers, resource professionals, landowners and the public about knotweeds ability to displace native plant communities and impact aquatic and riparian habitats. Project partners include Hoh River Trust, Rayonier, DNR, USDA Forest Service, Allen Lumber, and a number of small landowners.

Solberg Creek

The Solberg Creek project was completed on a tributary to the Sooes River prior to our involvement. The project involved removing an undersized perched culvert and replacing it with a Big R style bridge. For our involvement PCSC assisted Pacific Forest Management and placed trees along the stream to increase complexity, to recruit gravels and to create pool habitat for salmon and steelhead. Solberg Creek primarily produces coho salmon. The focus of the project is to provide spawning and rearing habitat.

Mill Creek Design and Assessment

The Mill Creek is a tributary of the Bogachiel River and is located in Forks. This project is a preliminary design project that addresses two issues: a WDFW constructed "carst" and the culvert crossing under Russell Road. Both structures are in-channel.

The "carst" is a concrete fishway that was constructed in the mid 1970s by WDFW. At that time dynamite was used to remove a small waterfall that was considered a passage barrier during low flows. Once the waterfall was removed, several truckloads of concrete were placed in the stream bed to stabilize it. By the early 1980s, the edges of the fishway were beginning to undercut as gravels were not naturally accumulating. WDFW placed several two-man rocks throughout the span of the fishway, using more concrete to hold them in place, allowing the creek to slow

and deposit spawning gravels in a more natural way.

At the point where Mill Creek intersects with Russell Road, there are two, side-by-side, badly degraded culverts that are undersized and have reached immanent failure status. They create a velocity barrier and when they fail miles of spawning and rearing habitat will be inaccessible to all life stages of salmonid. The City of Forks was issued an emergency HPA to temporarily stabilize the culverts. The City inserted smaller, PVC pipes and concrete was used to fill between the two pipes. This is a temporary effort that essentially further restricts salmon access to habitat above the site. PCSC, along with our consultant Phil DeCillis, surveyed all of Mill Creek to determine the quantity and quality of habitat along Mill Creek. PCSC partnered with DNR, Rayonier, The City of Forks and several small landowners to gain access and survey Mill Creek.

Monitoring and Maintenance

PCSC has the responsibility of monitoring and maintaining over forty WDFW restoration sites as well as the past PCSC project sites. Due to WDFW dwindling involvement in the area, we were asked to assist with the upkeep of constructed sites, such as Nolan Channel, Hoh Springs and Thomas Springs. The sites include a variety of restoration activities including fish ways, log and rock weirs and roughened channels. Primarily, we ensure the sites are functioning properly and allowing access. We ensure fish ways are clear of debris, beaver dams are fish-passable and that ponds have proper cover where needed. We continue to repair and replace structures when necessary due to age or natural occurrence such as floods. Our volunteers have donated over 345 hours, saving valuable dollars to be used on larger projects.

Elk Creek Trail

The Elk Creek trail project involved creating an interpretive trail along Elk Creek. The project creates an public area to interact and be educated about salmon habitat and provides an area for recreation. The project provides educational opportunities for the school system as it is located less than a mile from Forks High School. This summer, PCSC partnered with the SKY program, City of Forks, and the youth employment center to begin designing and building the trail. Over a mile of trail, three foot bridges and an education shed to get out of the rain

were constructed. Volunteers also tackled plantings and removal of invasive plants. The Ed Shed was built a half mile from the road so volunteers and correction crews used materials such as trees and gravel from near the site to build the shed.

FMS Water Quality and Enhancement

The FMS Water Quality and Enhancement project (Forks Schools) is an Outreach and Education project that engages kids in salmon and educates them in the classroom and out. This project provides funds for water quality education, how to conduct water quality testing, and why water quality is important to salmon. The Forks Middle School has taken ownership of this program. The Alternative school has provided an enormous amount of collected data on water quality in the Bogachiel and Mill Creek.



Staff and volunteers at Elk Creek trailhead

Executive and Administrative

The Administrative and Executive Director projects are, some of the least glamorous of the PCSC's projects. However, without these projects none of the other "dirt turning" jobs could be accomplished. It is these vital funds that all other things depend on.



Chinook salmon headed for the local food bank

Region 8 - Pacific Coast Salmon Coalition - Financial Summary

| Project Name | RFEG Funds | Volunteer Hours | Volunteer Dollars | Other Funds | In-Kind Contributions | Total Spent |
|---------------------------------------|---------------------|-----------------|--------------------|---------------------|-----------------------|---------------------|
| Quillayute River Nutrient Enhancement | \$796.00 | 1,059 | \$22,239.00 | | \$15,465.00 | \$38,500.00 |
| Borde Pond RSI | \$1,122.00 | 83 | \$1,743.00 | | | \$2,865.00 |
| Pole Creek | \$9,998.00 | 58 | \$1,218.00 | | \$8,750.00 | \$19,966.00 |
| Camp Creek | \$9,525.00 | 44 | \$924.00 | | | \$10,449.00 |
| Snider Creek | \$453.00 | 51 | \$1,071.00 | | | \$1,524.00 |
| Elk Creek/NOLT | \$8,443.00 | 692 | \$14,532.00 | \$59,384.00 | | \$82,359.00 |
| Solberg Creek | | 15 | \$315.00 | \$3,505.00 | \$27,958.00 | \$31,778.00 |
| Monitoring & Maintenance | \$20,490.00 | 345 | \$7,245.00 | | \$4,853.00 | \$32,588.00 |
| Mill Creek Design & Assess | | | | \$65,200.00 | | \$65,200.00 |
| FMS Water Quality | | 412 | \$8,652.00 | | \$22,456.00 | \$31,108.00 |
| Administration | \$53,088.00 | 378 | \$7,938.00 | | | \$61,026.00 |
| Executive Director | \$43,940.00 | | | \$22,816.00 | | \$66,756.00 |
| <i>Totals</i> | <i>\$147,855.00</i> | <i>3137</i> | <i>\$65,877.00</i> | <i>\$150,905.00</i> | <i>\$79,482.00</i> | <i>\$444,119.00</i> |

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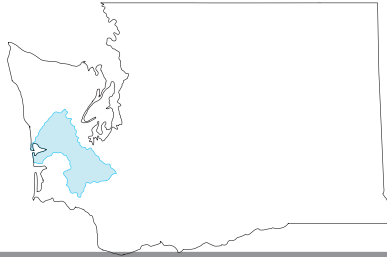
Executive Director, Carl Chastain

Administrative Assistant, Kendra Wilcox

Project Assistant, Alex Huelsdonk

Assistant Project Manager, Jamie Michel

Field Staff, Joe Thompson



REGION 9: Chehalis Basin Fisheries Task Force



CONTACT INFORMATION Chehalis Basin Fisheries Task Force

115 S Wooding Street
Aberdeen, WA 98520
Phone: (360) 533-1766
Fax: (360) 533-1767
E-mail: cbftf@reachone.com
Website: <http://www.cbftf.com>

Mission Statement

The Chehalis Basin Fisheries Task Force is dedicated to producing salmon for sport and commercial fisheries; enhancing Steelhead and Sea Run Cutthroat trout resources; and restoring, enhancing and protecting stream habitat critical to these anadromous species.

Overview

The Chehalis Basin Fisheries Task Force is a non-profit organization dedicated to increasing populations of salmon, Steelhead, and Sea Run Cutthroat trout by and for the citizens and the communities in the Chehalis River Basin.

The area served by the Chehalis Basin Fisheries Task Force encompasses the entire Chehalis River watershed; the second largest river system in the state of Washington. The basin includes 90% of Grays Harbor, 30% of Mason, 55% of Thurston, 50% of Lewis, and small parts of Pacific, Jefferson, Cowlitz, and Wahkiakum Counties, encompassing 1,694,951 acres. This region consists of two major and a number of minor, independent drainages; 1,391 rivers and streams containing 3,353 linear stream miles. The Hoquiam and Humptulips Rivers, plus several smaller systems, enter Grays Harbor from the north; the Chehalis River from the east; and the Johns and Elks Rivers, along with a number of smaller drainages, from the south.

Project Highlights

Carlisle Project

The Carlisle facility has two sites being used by the Onalaska High School Future Farmers of America Aquaculture Program. This facility provides field and class study, and hands on experience. Students learn sanitation methods, genetics, temperature unit measurements, picking of eggs and daily monitoring, incubation techniques and boating safety. The students perform water quality monitoring using sampling techniques including temp, pH and fecal coliform. The students raise coho in Carlisle Lake, and adult returns for coded wire tags and plant carcasses in streams for nutrient enhancement. In 2011, 106,000 coho, 35,000 steelhead, 8,000 rainbow trout and

4,000 triploid trout were raised at the Carlisle facility. Last year's return was about 2,000 fish. 35,000 steelhead were released in Carlisle Lake this year. Student volunteers play a large part in the success of the project. The sixteen students in the class and the two environmental educators logged 4,790 volunteer hours in 2011.

Satsop Springs

In conjunction with the Bingham Hatchery, the Satsop Springs Hatchery raised 400,000 chum, 475,000 Chinook, and 450,000 coho for release in 2011. With assistance from local volunteers, who logged in 2,066 hours. The program reared 3,200 rainbow trout, which were planted in the Vance Creek Ponds, Lake Newatzel, Stump Lake, Aberdeen Lake, Lake Sylvia, Failor Lake and Duck Lake. The rainbow trout released weighed between 4 and 10 pounds each and are considered some of the best trout raised in the state by WDFW.

Satsop Springs Egg and Carcass Program

The Satsop Springs Hatchery Egg and Carcass program sold non-viable eggs and carcasses to generate more than \$22,000.00. The funds will be used at the Satsop Springs Hatchery for operation, improvements, maintenance and upgrades. Some of the funds from this program allowed CBFTF to add office space to an existing building. This new office space will allow us to merge our hatchery operation with our administrative operation into one facility for communication and budget efficiency.

Satsop Nutrient Enhancement Project

The nutrient enhancement project is conducted during salmon runs between the months of October and December each year. 1,058 fish carcasses weighing in at almost 9,000 pounds were distributed within the Satsop River Watershed. The project seeks to enhance nutrient levels of the West Fork Satsop River, the Middle Fork Satsop River, and a number of their primary tributaries by distributing fish carcasses in strategic areas. The intent is to increase ocean-derived nutrients in areas of the Basin with adult salmon.

Fish Passage Barrier Removal

Davis Creek Culvert

The Davis Creek project is located on South Bank Road in Oakville on Greys Harbor County property. The existing culvert was a round, steel, corrugated pipe 5.5 foot in diameter in a stream with an average bankfull width of 24 feet. The culvert was removed and replaced with a bottomless arch culvert 32 feet wide, 11 feet high and 100 feet long made of corrugated galvanized steel. This was a cooperative effort with funds from SRFB, Grays Harbor County, NACO, USFWS, and the Confederated Tribes of the Chehalis Reservation. The completion of this project opened up approximately 12 miles of fish habitat.



FFA students volunteer to raise fish



During construction



Davis Creek after

Region 9: Chehalis Basin Fisheries Task Force - Financial Summary

| Project Name | RFEG Funds | Volunteer Hours | Volunteer Dollars | Other Funds | Total Spent |
|---------------------|--------------------|-----------------|---------------------|---------------------|---------------------|
| Administration | \$49,571.00 | 441 | \$9,261.00 | \$10,067.00 | \$68,899.00 |
| Carlisle Project | \$6,602.00 | 4790 | \$100,590.00 | | \$107,192.00 |
| SS ALEA | | 2066 | \$43,386.00 | \$29,859.00 | \$73,245.00 |
| Satsop Springs | \$39,018.00 | | \$- | | \$39,018.00 |
| SS E & C | | | \$- | \$22,620.00 | \$22,620.00 |
| SRFB/GHC/NACO/USFWS | | | \$- | \$337,448.00 | \$337,448.00 |
| <i>Total</i> | <i>\$95,191.00</i> | <i>7297</i> | <i>\$153,237.00</i> | <i>\$399,994.00</i> | <i>\$648,422.00</i> |

Board of Directors

Upper Basin Representatives

- Chanele Holbrook, Heernett Environmental Foundation, Seat #1
- Jim Tyner, Carlisle Environmental Education, Seat #3
- Brian Taylor, Carlisle Environmental Education Seat #5

Middle Basin Representatives

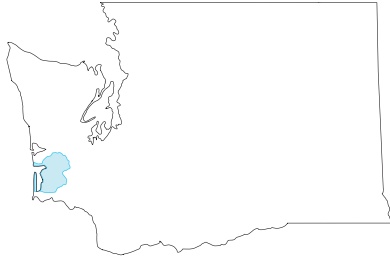
- Ronn Schuttie, Independent Representative Seat #6
- Otto Aldridge, Independent Representative Seat #7
- Greg Jones, Elma Game Club, Seat #8
- Commissioner Herb Welch, Grays Harbor County, Seat #9
- Commissioner Terry Willis, Grays Harbor County, Alternate Seat #9
- Stan Fry, Loyal Order of the Moose Seat #11,
- Lonnie Crumley, Streamworks, LLC, Seat #12, Chairman

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- Terry Baltzell, Project Team Leader, Seat #17
- Commissioner Stan Pinnick, Port of Grays Harbor, Seat #18, Financial Team Leader
- Ken Rausch, Port of Grays Harbor, Alternate Seat #18
- Lloyd Case, Independent Representative, Seat #19, Secretary
- Doug Warnken, Grays Harbor Poggie Club, Seat #20

Staff

- Office Manager*, Terry Nielsen
- Satsop Springs Hatchery Manager*, Steven Franks



REGION 10: Willapa Bay Regional Fisheries Enhancement Group



CONTACT INFORMATION

Willapa Bay Regional Fish Enhancement Group

PO Box 46

South Bend WA 98586-0046

Phone: (360) 267-5244

Fax: (360) 267-6023

E-mail: lakebob@comcast.net

Website: www.wbrfeg.org

Mission Statement

Return sustainable natural spawning salmon to the rivers and streams located in Willapa bay while utilizing Remote Site Incubators (RSIs) to bring the streams and rivers back to their carrying capacities. Repairing and stabilizing habitat is being implemented as needed

Overview

Willapa Bay Regional Fisheries Enhancement Group focuses on restoration of salmon habitat in Washington State's Pacific County, encompassing all of the streams that drain into Willapa Bay.

The Willapa Bay Regional Fisheries Enhancement Group was started in 1985 by local commercial fishermen who wanted to enhance the salmon population in Willapa Bay. Our organization is run entirely by volunteers out of their homes and businesses.

Each year, using volunteers, WBFEG raises millions of salmon eggs, smolt, and fry and releases them into the creeks and rivers around Willapa Bay.

Project Highlights

March Family Fish Spawning Channels and Rearing Ponds

March Family Fish Spawning Channels and Rearing Ponds are located on the upper North River, 51 miles from where North River enters Willapa Bay. This project is all natural with the spawning and rearing channels being fed by water coming off the surrounding hills as well as water from North River. There were 300,000 coho salmon, 50,000 chum salmon and 10,000 marked steelhead released from the March Project in 2011.

Willapa Bay Gillnetters Association; RSI's

- Oxbow Creek; 250,000 coho eggs
- Electric Creek; 100,000 chum eggs
- Fleece Creek; 50,000 chum eggs



Instream RSI



Instream RSI

Region 10: Willapa Bay Regional Fisheries Enhancement Group - Financial Summary

| Project Name | RFEG Funds | Volunteer Hours | Volunteer Dollars | Other Funds | Total Spent |
|----------------|----------------|-----------------|-------------------|-------------|-----------------|
| March Fish | \$2,950 | 1588 | \$33,348 | | \$36,296 |
| Coalition Dues | \$1,000 | | | | \$1,000 |
| ECP | \$1,250 | | | | \$1,250 |
| RSIs | | 310 | \$6,510 | | \$6,510 |
| Board Members | | 150 | \$3,150 | | \$3,150 |
| Administration | \$143 | 14 | \$336 | | \$479 |
| <i>Total</i> | <i>\$5,343</i> | <i>2064</i> | <i>\$43,344</i> | | <i>\$48,687</i> |

The WBRFEG was in a transition period and is expanding the RSI sites, enhancement and habitat projects for 2012-2013.

Board of Directors

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Mark Ashley, Commercial Fisherman

Secretary

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Treasurer

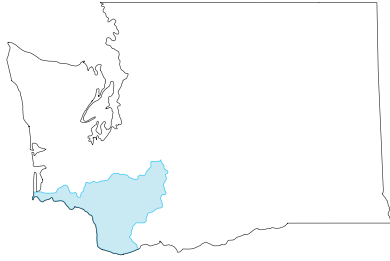
David Lewis, Businessman

Member at large - Representative for WBRFEG

Bob Lake, Businessman and Commercial Fisherman



Newly-hatched chum salmon



REGION 11: Lower Columbia Fish Enhancement Group



CONTACT INFORMATION

Lower Columbia Fish Enhancement Group

12404 SE Evergreen Highway
Vancouver, WA 98683
Phone: (360) 882-6671
E-mail: info@lcfeg.org
Website: www.lcfeg.org

Mission Statement

To lead the process of salmon and steelhead recovery in a way that ensures community involvement in habitat restoration so that abundant, naturally reproducing salmon populations occur throughout the Lower Columbia River region.

Overview

Lower Columbia Fish Enhancement Group (LCFEG) has been actively involved in salmon and steelhead habitat restoration and enhancement activities since our inception in 1991. To achieve our mission, LCFEG works with private and public land owners to restore salmon habitat and recover local salmon and steelhead populations. As a community-based non-profit organization, LCFEG receives valuable support from local citizens, students, NGO's, private property owners and local businesses who donate their time, materials and cash to help us leverage government grants. The support for our program is a reflection of our regions rich salmon history which has helped support our communities culturally as well as economically.

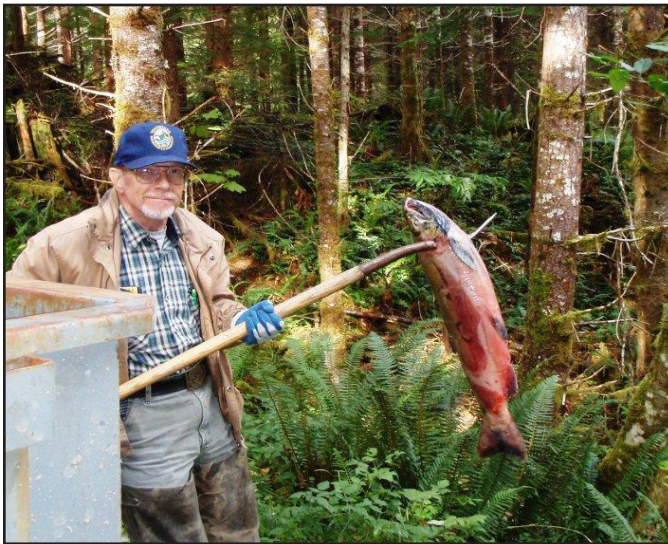
Because each of our watersheds contain at least one salmon hatchery, the LCFEG focus is projects that support wild salmon production. Fish habitat in the region has been severely degraded by over 150 years of urban and industrial development, timber harvest, rail & road building, diking, drainage and a host of other activities. CLFEG works with WDFW Habitat and Fish Program Managers, federal resource agency biologists, our Lead Entity, scientists, local governments, private landowners, conservation districts, offender crews and volunteers to identify and implement priority habitat restoration projects.

In 2011/12, LCFEG implemented both its Strategic Plan and the 2005 Lower Columbia Salmon Recovery and Fish & Wildlife Sub-Basin Plan approved by NOAA Fisheries. In working to become the region's primary salmon habitat restoration organization, LCFEG, worked to link projects to the regional Recovery Plan and Sub-Basin Plan Priorities. We used the 6-year Habitat Strategy for determining projects completed or underway. When practical and feasible, these documents are used to prioritize projects for the upcoming year.

The LCFEG focuses on four key programs to help us achieve our mission:

- Habitat Restoration
- Nutrient Enhancement
- Education & Outreach
- Assessment, Monitoring, Development

These four programs are where we can provide the greatest benefit to salmon with our limited financial resources. Focusing on these programs allows us to identify how we can best leverage the most out of each salmon recovery dollar we spend and to educate citizens on why our work benefits them and fish. It is LCFEG's desire to better teach our citizenry about fish response to all the recovery work going on in SW Washington. We feel this is especially important given the current depressed economy.



Hal throwing carcass in to Deer Creek

Programs

Nutrient Enhancement

This project, initiated in 2004, with funding from a Community Salmon Fund and ALEA grant. This project benefits fish, wildlife and the riparian plant community by increasing nutrient levels available in the watershed through salmon carcass placement. Between July of 2011 and July of 2012, LCFEG facilitated disbursement of over 45,000 carcasses in the Lower Columbia Watershed. The natural decay of dispersed salmon carcasses feeds tens of thousands of naturally produced salmon and steelhead juveniles within the Kalama, Washougal, North Fork and East Fork Lewis Rivers. Rivers and fish that would not receive this important food source.

Surplus hatchery salmon carcasses provide the Marine

Derived Nutrients to 90+ miles of river and tributaries to increase the surrounding aquatic and ecosystem production. In watersheds with intact rearing and spawning habitat, nutrient enhancement may be the last option in an attempt to bolster juvenile production and assist the recovery of dwindling returns of natural-origin salmon and steelhead stocks. We strongly believe this program is invaluable in the recovery and survival of these ESA listed salmonid stocks rearing in the headwaters of these watersheds. Partners include WDFW, Fish First, Lower Columbia Fly Fishers, Cowlitz Indian Tribe, Clark-Skamania Fly Fisher and Coastal Conservation Association.

Outreach and Education

This fiscal year's Education and Outreach Program involved numerous year-round activities including student or citizen volunteer planting parties at various project sites, regular educational presentations on local salmon species and their habitat requirements, on-site data collection by volunteers to meet monitoring objectives, LCFEG displays and volunteer recruitment/sign-ups at local festivals, fairs, salmon celebrations and community events along with website updates.

Assessment, Monitoring, and Development

LCFEG is engaged in habitat assessments designed to identify habitat restoration projects. LCFEG staff, consultants and volunteers analyze the regional recovery plan to identify limiting factors and conduct field surveys to determine habitat restoration alternatives. The data provides the necessary information to funding sources, project partners, regulatory agencies, and perhaps most importantly, monitoring helps inform the development of future LCFEG projects.

2011-2012 Habitat Restoration Projects

- Duncan/Hamilton Springs
- Port of Kalama
- Lawton Creek
- Pleasant Valley
- Cowlitz Filla/South Fork Toutle
- Dean Creek Restoration
- Lockwood Creek Restoration
- Woodward Creek Restoration
- Duncan Dam Design
- Hamilton Phase II
- Grays River Restoration
- Upper Washougal III Restoration
- Eagle Creek

- NFK Lewis 13.5 Restoration Phase I
- NFK Lewis 13.5 Restoration Phase II
- Grays 2D Design
- Nutrient Enhancement
- Germany Creek Nutrient Enhancement
- Hardy Creek Design
- *26,478 volunteer and offender crew hours were reported during the 2012 fiscal year.*

In-Stream Habitat Project Highlights

Hamilton Creek Phase II Restoration

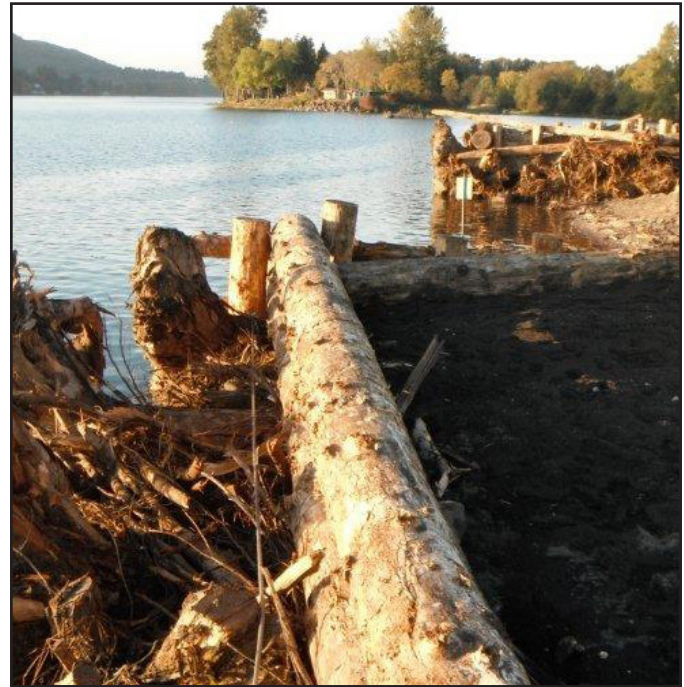
This project restored 900 feet of Hamilton Spring spawning channel and constructed 300 feet of groundwater-fed channel parallel to the existing channel. In 1998, the 1,600 foot long spawning channel was designed and constructed by WDFW. It has become an important lower Columbia River chum production site. Limited maintenance led to deteriorating adult returns and limited ESA listed chum population use. Post restoration, chum use increased nearly three-fold and spawning occurred over the entire length of groundwater-fed channel. Success!

This project will install complexity log jams through 0.7 miles of the lower Hamilton Creek main stem to create scour pools, a branching island network, sort spawning gravels, reduce depth to width ratio, and stabilize eroding banks. These treatments increase the quantity and quality of rearing and spawning habitat to bolster the future production of four returning ESA listed salmonid stocks.

Upper Washougal River Restoration III

This multi-phased project funded by SRFB involves

restoring deeply incised channel conditions resulting from historical log drives and catastrophic fires beginning in the late 1800s and lasting through 1940s. The project entails installation of large wood structures designed to aggrade sediment, reduce channel width and increase habitat diversity. Phase 3 of the Upper Washougal was initiated in 2011 and involved offender labor provided by the Washington Department of Correction's Larch Mountain Correctional facility. The project directly benefits ESA-listed summer steelhead, Chinook, coho and winter steelhead.



Salmon habitat restoration and bank stabilization performed at Port of Kalama

2011-2012 Partners in Salmon Recovery

Bonneville Power Administration ~ City of Camas ~ Native Fish Society ~ City of North Bonneville ~ NW Power and Conservation Council ~ NOAA fisheries ~ City of Vancouver Water Resources Center ~ Port of Kalama ~ Pacifi-Corps ~ Clark Public Utility ~ Private Landowners (Multiple) ~ Clark Skamania Fly Fishers ~ Salmon Recovery Funding Board ~ Clark, Cowlitz, Lewis, Skamania, Pacific, and Wahkiakum Counties ~ Columbia Land Trust ~ SW WA Anglers ~ Columbia Springs Environmental Ed Center ~ Tacoma Power ~ Conservation Districts (Clark, Lewis, and Cowlitz) ~ Coastal Conservation Association ~ US Fish and Wildlife Service ~ Cowlitz Tribe ~ US Forest Service and Resource Advisory Committee ~ Department of

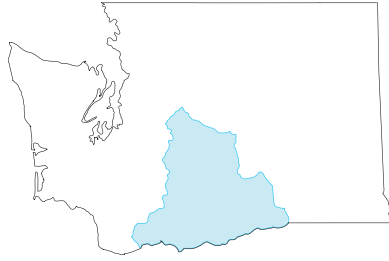
Corrections ~ US Geological Survey (Columbia River Lab) ~ Department of Ecology ~ WA Department of Ecology ~ Fish First Forest Service ~ Hudson's Bay H.S ~ WA Department of Fish and Wildlife ~ Kalama Sportsman's Club ~ WA Department of Natural Resources ~ Killian Pacific ~ Washougal, Vancouver, ~ Evergreen School Dist. ~ Longview Timber ~ Watershed Stewards ~ Lower Columbia Fish Recovery Board ~ Weyerhaeuser ~ Lower Columbia Fly Fishers ~ Williams Pipeline ~ Mark's Marine ~ WSU Environmental Information Coop ~ National Fish and Wildlife Foundation ~ ENTRIX, Waterfall Engineering, Inter-Fluve ~ Mike Watters Excavation ~ Skamania Landing Owners Association ~ Port of Kalama

Region 11: Lower Columbia Fish Enhancement Group - Financial Summary

| Program/Project | RFEF FUNDS | Volunteer Hours | Volunteer Dollars | Other Funds | Total Spend |
|-------------------------|-----------------|-----------------|-------------------|--------------------|--------------------|
| Administration | \$35,901 | \$209 | \$4,389 | | \$40,290 |
| LCFEG Riparian Nursery | \$103 | \$1,560 | \$32,760 | \$10,153 | \$43,016 |
| Nutrient Enhancement | | \$1,677 | \$35,217 | \$22,692 | \$57,909 |
| Restoration Support | | | \$0 | \$4,612 | \$4,612 |
| BPA Duncan/Hamilton | | | \$0 | \$342,859 | \$342,859 |
| Outreach & Development | \$15,187 | \$200 | \$4,200 | \$24,392 | \$43,779 |
| Lower Washougal | | | \$0 | \$13,500 | \$13,500 |
| Port of Kalama | | \$720 | \$15,120 | \$87,185 | \$102,305 |
| Woodard Creek | \$3,841 | \$1,340 | \$28,140 | \$52,828 | \$84,809 |
| Cowlitz Filla/SF Toutle | \$65 | \$921 | \$19,341 | \$255,595 | \$275,001 |
| Dean Creek | \$14,492 | \$3,082 | \$64,722 | \$107,325 | \$186,539 |
| Lockwood Creek | | \$450 | \$9,450 | \$54,019 | \$63,469 |
| Lewis Sheretz | | | \$0 | \$16,170 | \$16,170 |
| Pleasant valley | \$19 | \$544 | \$11,424 | \$33,639 | \$45,082 |
| Duncan Dam Design | \$1,148 | | \$0 | \$47,233 | \$48,381 |
| Lawton creek | | | | \$41,626 | \$41,626 |
| Hamilton Springs II | \$114 | \$4,220 | \$88,620 | \$259,511 | \$348,245 |
| Lewis River 13.5 2010 | \$5,185 | \$4,336 | \$91,056 | \$519,579 | \$615,820 |
| Upper Washougal III | \$768 | \$6,679 | \$140,259 | \$226,073 | \$367,100 |
| Eagle Creek Design | | | \$0 | \$49,238 | \$49,238 |
| Grays 2D Design | | | \$0 | \$3,470 | \$3,470 |
| Hardy Creek | | | \$0 | \$8,177 | \$8,177 |
| Germany Creek | \$6,781 | \$540 | \$11,340 | \$104,925 | \$123,046 |
| Ground Water Monitoring | | | \$0 | \$27,685 | \$27,685 |
| <i>Total</i> | <i>\$83,604</i> | <i>\$26,478</i> | <i>\$556,038</i> | <i>\$2,312,486</i> | <i>\$2,952,128</i> |

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Side View logjam installed at Hardscramble creek



REGION 12: Mid-Columbia Fisheries Enhancement Group



CONTACT INFORMATION

Mid-Columbia Fisheries Enhancement Group

P.O. Box 1271

White Salmon, WA 98672

Phone: (509) 281-1322

E-mail: fish@midcolumbiarfeg.com

Website: www.midcolumbiarfeg.com

Mission Statement

The mission of the Mid-Columbia Fisheries Enhancement Group is to restore self-sustaining salmon and steelhead populations through habitat preservation and restoration projects which assist landowners and promote community partnerships throughout our region.

Overview

Mid-Columbia Fisheries Enhancement Group is a non-profit (501(c)3) organization dedicated to restoring and protecting fish habitat. Mid-Columbia Fisheries (MCF) approach includes:

- Sponsoring and implementing high-quality habitat restoration and protection projects throughout our region.
- Providing educational and community outreach programs that promote the long-term commitment our society needs to protect fisheries resources.

The Mid-Columbia region includes several important steelhead and salmon rivers, notably the Wind River, the White Salmon River, the Klickitat River, the Yakima River and numerous tributaries to the Columbia River.

Along with its large size, this region has a diversity of watershed and fisheries issues unique to each river and watershed. The watersheds provide habitat for eight salmonid species listed as threatened or endangered under the Endangered Species Act, as well as a number of sensitive and culturally significant stocks.

Project Highlights

Reecer Creek Floodplain Restoration Project

This project relocated 4,000 feet of Ellensburg's Reecer Creek to its historic floodplain. Suver levee, which constrained the creek, was set back in the fall of 2010 opening 58 acres of floodplain and upland habitat. A new, meandering channel was excavated during 2010 and 2011. Large wood structures were installed and the creek was diverted into the restored channel in July, 2011. Washington Conservation Corps (WCC) members and community volunteers installed 10,000 rooted plants, live stakes and plugs in the fall. The



A bobcat with an auger attachment digs holes for riparian planting at the Reecer Creek Floodplain Restoration project in Ellensburg.

rooted plants were watered throughout the summer and weed management is ongoing. Funding for the project was provided by the City of Ellensburg, Salmon Recovery Funding Board (SRFB), Department of Ecology (WDOE), Yakama Nation, National Fish & Wildlife Foundation (NFWF), the US Fish & Wildlife Service (USFWS) and WDFW's ALEA program. Key partners also include the South Central Washington RC&D, the Kittitas County Water Purveyors, Kittitas Reclamation District, WDFW, the Yakima Tributary Access and Habitat Program, Yakima Basin Fish and Wildlife Recovery Board, and the Kittitas County Conservation District.

Jack Creek Restoration

August and September saw completion of construction on the Jack Creek Restoration project. Begun in 2011, the project restored floodplain connectivity, channel habitat complexity and stream-bank condition in two reaches of Jack Creek, a tributary to the North Fork Teanaway River in the Upper Yakima basin. In the upper reach, historic railroad logging and road maintenance had prevented natural channel migration in multiple locations on land managed by American Forest Land Company, LLC. The Forest Service relocated 0.9 mile of FS Road 9738 away from the stream's banks, allowing MCF to complement their efforts with large wood placement, bank sloping and live staking. In the lower reach of the stream, the primary channel was devoid of instream structure and riparian cover. We graded a short section of the stream to direct flow into an existing well-shaded secondary channel, placed large wood in both channels and sloped back vertical banks. Live stakes and rooted plants will be planted in October of 2012 and the project area fenced to exclude cattle in the spring of 2013. The project benefits steelhead,

Chinook and enhances critical habitat for bull trout. Funding for the project is being provided by the USFWS, the National Forest Foundation, WDOE, SRFB, USFS, the Regional Fisheries Enhancement Group Program and the Overlake Fly Fishing Club.

Large Wood Replenishment

Mid-Columbia Fisheries continues to work with the WCC, the Yakama Nation and the USFS to increase large wood loading in Upper Yakima streams. In February and March, WCC crews selectively thinned riparian stands along Swauk and Taneum Creeks and moved the felled trees into the stream channels.

Swauk Creek Floodplain Planting

MCFs worked in partnership with The Nature Conservancy and the WWCC to install more than 1,800 native trees and shrubs on four acres of floodplain habitat adjacent to Swauk Creek in October. The planting was designed to benefit habitat for steelhead and Chinook, as well as to create high quality habitat for migrating birds.

Upper Rattlesnake Creek Restoration

In September, we completed an instream project to stabilize approximately 600 feet of Upper Rattlesnake Creek, a key tributary to the White Salmon River. The goal of the project is to prevent stream incision, and protect and restore the function of the adjacent floodplain and upstream wetlands. The project included construction of three large riffles, placement of approximately 80 large trees on the floodplain, riparian planting and fencing. Partners on the project include the WDNR and Yakama Nation, with funding from the SRFB.

Wind River Restoration and Martha Creek Dam Removal

In the Wind River watershed, MCF sponsored a grant from Ecotrust to assist the Forest Service in decommissioning approximately 2.9 miles of road during late summer. The work eliminated more than 30 culverts including four major fish passage barriers. During the summer, the grant supported the removal of a small dam (7 ft. high by 40 ft. wide) on Martha Creek, a tributary to Trout Creek. Martha Creek is heavily used by steelhead for spawning and rearing. Removal of the obsolete dam has improved fish passage and hydrologic conditions in this reach. The projects were managed by the USFS.

Nile Creek Culvert Removal

Regional Fisheries Enhancement funds supported the removal of a damaged Forest Service culvert on Nile Creek.

Removal of the damaged culvert protected 4.5 miles of downstream habitat by eliminating the possibility of a wash-out. A wash out would cause a significant amount of road fill and fine sediment to enter the stream during the steelhead incubation period.

White Salmon River Clean-up at the Confluence

In cooperation with Underwood Conservation District and the Yakama Nation, MCF helped organize a volunteer clean-up at the mouth of the White Salmon River. Thirty-five volunteers removed 12 sunken, dilapidated and abandoned boats, a large dilapidated dock and more than 40 cubic yards of trash. The event removed garbage from the lower river ahead of the October 2011 breach of Condit Dam. Many agencies and individuals provided assistance with the clean-up.



An excavator removes a sunken boat as part of a clean-up project on the lower White Salmon river

Education & Outreach

Educational Events

Mid-Columbia Fisheries helped plan, organize and support the following educational events:

- Water Jam – an event that reached approximately 380 students from Klickitat and Skamania Counties with hands-on learning stations in salmon, habitat restoration, conservation and ecology.
- E3 Winter Fair – an annual showcase of sustainable economic, educational and environmental endeavors in Kittitas County.
- Salmon Education Days at Diamond H side channel – an event that reached approximately 200 students from the Ellensburg area with learning stations focused on restoration, ecology and salmon.
- Reecer Creek Floodplain Restoration Grand Opening/ Arbor Day Celebration – a ribbon cutting event

featuring educational stations, volunteer planting and salmon release along Ellensburg’s Reecer Creek.

- White Salmon River Homecoming and the Welcome Home Salmon art show – both events celebrated return of anadromous fish to the White Salmon River after removal of Condit Dam, which blocked fish passage at river mile three for 100 years.

Additionally, our staff made presentations to elementary, middle, high school and college class rooms, home school groups, retirement homes and at many local festivals and events, including:

- Salmon Summit – a two day event that reaches more than 1,000 students from Benton County.
- Teanaway River Fest, Yakima Greenway Rivers Festival, Yakima Arboretum Festival and Get Intimate with the Shrub-Steppe!
- Kittitas County Fourth Grade Camp, Valley View 5th Grade Camp & Yakima Arboretum Summer Camp
- Earth Day activities at multiple locations in our region.

Beavers: Public Education and Relocation

Mid-Columbia Fisheries is working to increase public understanding and acceptance of beavers and to relocate “problem” beaver to headwater areas in the upper Yakima basin. The goal of these efforts is to promote the natural role beavers serve in improving instream salmonid habitat through increasing water retention, creating pool habitat and improving floodplain and wetland functions. Our staff conduct public presentations, meet with landowners, identify headwater areas suitable for beaver relocation and trap and transport beaver. The work is supported by a SRFB grant held by WDFW and by Forest Service Challenge Cost Share funds.

White Salmon River Watershed Education Project

The goal of the White Salmon River Watershed Education Project is to engage local students and the community about the White Salmon River and the removal of Condit Dam. The project supported outreach at a number of community events. This project funded presentations and field trips for local students. The project is a collaboration between Mid-Columbia Fisheries, the Yakama Nation and the USFWS – Spring Creek Hatchery.

Wild Salmon Task Force

The goal of the Wild Salmon Task Force is to provide an on-the-ground crew to mitigate impacts to salmonids



Mel Babik, Project Manager, releasing a beaver in the upper Yakima Basin. “Nuisance” beavers are being moved from lowland agricultural areas to higher elevation headwaters habitat where their dam building activities benefit salmon habitat.

from river recreationists. The Bull Trout Task Force consists of a team of two WCC volunteers who make contact with anglers and recreationists, post educational signs, conduct public presentations and remove the “play” dams that can keep migrating fish from reaching their spawning grounds. In the fall, the Task Force assists with monitoring and redd surveys. The 2011 and 2012 crews were supported by a grant from the NFWF and USFWS with in-kind support from the USDA Forest Service, the Yakima Basin Fish and Wildlife Recovery Board, and WDFW.

Project Stewardship

The flexibility of Regional Fisheries Enhancement Group funding allows us to steward projects until native plants are fully established. Irrigation and weed management, both necessary to the establishment of native riparian plant communities, often require a longer commitment than grant funding supports. Mid-Columbia Fisheries uses some RFEG funding to care for projects on Cowiche, Mercer and Swauk Creek to ensure success of riparian plantings.

Project Planning & Development

Yakima Delta

Mid-Columbia Fisheries and Benton Conservation District are working with Intera, Inc. to model

temperature, flow and sedimentation dynamics at the mouth of the Yakima River. Thermal imaging indicates that extreme temperatures in this area may act as a barrier to migrating salmon. The model results, coupled with fish utilization data from the Yakama Nation, will allow the Yakima Delta Technical Advisory Group to determine whether a modification to the Bateman Island causeway might improve salmonid migration and survival in this area.

Teanaway Forks Large Wood Trapping

Mid-Columbia Fisheries is working to identify areas in the West, Middle and North Fork Teanaway Rivers where large wood trapping structures could accumulate spawning gravels, increase pool quality and provide channel roughness. Historic splash damming left large expanses of exposed bedrock in each of these rivers. The goal of the project is to design large wood trapping structures for multiple locations within stream reaches on commercial forest land located well-upstream from other private property and infrastructure.

Cowiche Creek Floodplain Reconnection: Phase 2

Following successful floodplain re-connection projects upstream in Cowiche Creek, Mid-Columbia Fisheries is planning two restoration projects on lower Cowiche Creek. The projects will remove a railroad berm that is functioning as a dike, remove concrete from the channel and stream banks then plant the banks with native trees and shrubs. The projects are supported by a SRFB grant and are planned in cooperation with the City of Yakima, the Cowiche Canyon Conservancy and private landowners.

Backyard Conservation

Mid-Columbia Fisheries is expanding our “backyard conservation” work with funding from the Department of Ecology (DOE). The DOE grant will support the conversion of lawn to native plants on 8-9 streamside properties in Benton, Yakima and Kittitas Counties. Our work will be guided by last year’s “Welcoming Salmon to Our Backyards”, accessible on-line at <http://midcolumbiarfege.com/what-we-do/backyard-riparian-buffers/>. The grant also funds the conversion of ten acres of riparian pasture to native trees and shrubs along the Yakima River near Sunnyside.

Region 12: Mid-Columbia Fisheries Enhancement Group - Financial Summary

| Program/Project | RFEG | Volunteer Hours | Volunteer Dollars | In-kind Donations | Grant Funds | Total |
|--|------------------|-----------------|-------------------|-------------------|------------------|--------------------|
| Reecer Creek | \$14,829 | 325 | \$6,825 | | \$567,931 | \$589,585 |
| White Salmon River Education | \$1,200 | | | | \$7,658 | \$8,858 |
| Bull Trout Task Force | \$1,225 | | | | \$43,710 | \$44,935 |
| Beaver Ed & Beaver Projects | \$5,977 | 241 | \$5,061 | | \$11,998 | \$23,036 |
| Wind River & Martha Creek | \$0 | | | \$8,000 | \$16,458 | \$24,458 |
| Teanaway River | \$13,491 | | | | \$0 | \$13,491 |
| Columbia Mainstem Assessment | \$0 | | | | \$5,000 | \$5,000 |
| Jack Creek | \$24,151 | 62 | \$1,302 | \$25,000 | \$81,823 | \$132,276 |
| Mercer Creek | \$1,250 | 22 | \$462 | | \$450 | \$2,162 |
| Rattlesnake Creek | \$1,581 | | | \$12,000 | \$63,144 | \$76,725 |
| Nile Creek | \$2,963 | | | \$1,650 | \$0 | \$4,613 |
| Trout Creek | \$0 | | | | \$2,809 | \$2,809 |
| Cowiche Creek | \$6,879 | 6 | \$126 | \$850 | \$0 | \$7,855 |
| Yakima Riparian | \$1,100 | | | | \$0 | \$1,100 |
| Large Wood Repl Yakima Basin | \$910 | | | | \$22,260 | \$23,170 |
| Yakima Delta | \$8,478 | | | | \$58,004 | \$66,482 |
| White Salmon River & Tribs | \$1,155 | 171 | \$3,591 | \$14,600 | \$29,897 | \$49,243 |
| Swauk Creek | \$1,691 | | | \$3,560 | \$21,989 | \$27,240 |
| Naches Side Channel | \$821 | | | | \$1,596 | \$2,417 |
| Other Restoration Projects & Project Development | \$4,062 | 64 | \$1,344 | | \$5,491 | \$10,897 |
| Other Education Projects | \$13,321 | 25 | \$525 | | \$1,002 | \$14,848 |
| Administration and Related | \$75,133 | 240 | \$5,040 | | \$12,384 | \$92,557 |
| <i>Totals</i> | <i>\$180,217</i> | <i>1156</i> | <i>\$24,276</i> | <i>\$65,660</i> | <i>\$953,604</i> | <i>\$1,223,757</i> |

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Glenn Miller, Construction Manager
Yakima County Road Department

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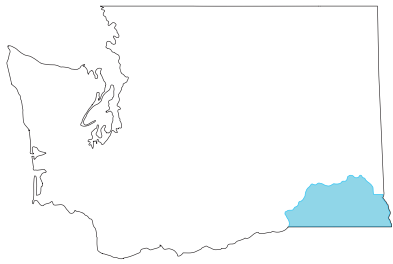
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REGION 13: Tri-State Steelheaders Salmon Enhancement Group



CONTACT INFORMATION

Tri-State Steelheaders Salmon Enhancement Group

P.O. Box 1375

216 N. Roosevelt

Walla Walla, WA 99362

Phone (509) 529-3543

Fax (509) 529-3543

Email: tssfsh@tristatesteelheaders.com

Website: www.tristatesteelheaders.com

Mission Statement

At Tri-State Steelheaders Salmon Enhancement Group our mission is to restore sustainable populations of native salmonids by enhancing habitat, providing public education and promoting recreational angling for future generations.

Overview

Tri-State Steelheaders has been actively involved in salmonid habitat restoration since its inception in the mid-1960s. The organization was granted 501(c)3 status by Washington State in 1989 and was designated a Regional Fisheries Enhancement Group in December 2000. As a community-based non-profit organization, we receive valuable support from a diverse membership that includes property owners, local businesses, anglers and concerned citizens.

The Tri-State Steelheaders Salmon Enhancement Group (TSS) focuses on restoring and enhancing in-stream and riparian habitat, and providing community outreach and education programs. Creating partnerships with landowners, government agencies and other conservation organizations is of paramount importance.

During the 2012 fiscal year Tri-State Steelheaders completed 15 habitat restoration and three fish passage projects. In total, our volunteers donated 1,979 hours working on habitat enhancement projects and educational programs.

Project Highlights

Bridge to Bridge Final Design

Final designs and construction specifications were completed that remove approximately ½ mile of levee on the Walla Walla River near Lowden, WA. The project installs large wood structures for bank stability and instream habitat. Removal of the levee will improve floodplain connectivity and allow meander formation where it is now prevented. Design and construction funding are provided by SRFB. Construction is scheduled for 2013.

Creating Urban Riparian Buffers (CURB)

Since 2007, Tri-State Steelheaders has partnered with Walla Walla County Conservation District, Kooskooskie Commons,

WDOE and local streamside property owners to improve water quality and riparian habitat on Walla Walla's urban creeks by installing native plant buffers. Volunteers remove sod and invasive species, and assist with planting native trees, shrubs, forbs and grasses. Property owners assume responsibility for maintenance of their native plant buffers for 10 years. This year, 14 new urban riparian buffers were completed, bringing the total to 43. During this period, CURB also provided educational opportunities for middle and high school students that included three water quality monitoring field trips, a stream flow monitoring trip and a riparian planting project. Volunteers and participating homeowners contributed 1,183 hours to enhance water quality and riparian habitat on urban streams.



Urban riparian buffer planting along Stone Creek

George Creek Wildlife Area Habitat Restoration

Degraded instream and riparian conditions at the George Creek Wildlife Area in Asotin County will be improved. Past agricultural uses and flash flow events have left nearly no riparian vegetation and poor instream habitat. Project activities intend to restore meander to portions of the creek, add large wood structures, increase water table elevation and improve riparian condition. In FY 2012, engineering and design were initiated by project partner WDFW. Project construction is scheduled for 2013.

Mill Creek Passage: Flume Transitions

The Mill Creek flood control channel includes over two miles of concrete lined channel. The Mill Creek Fish Passage Assessment identified high flow and low flow passage barriers in the channel. This project implemented fish passage improvements at each end of the concrete channel. Existing concrete was cut and removed, precast elements were placed and new concrete poured. The

reconfigured ends of the channel eliminate passage problems and provide resting pools. The project was funded by SRFB and the Confederated Tribes of the Umatilla Indian Reservation through BPA.



Precast roughness panels and a resting pool will improve fish passage in the Mill Creek flood control channel.

Mill Creek Sills Passage

The Mill Creek flood control channel includes 263 energy dissipating weirs. These weirs (sills) were identified as low flow passage barriers in the Mill Creek Fish Passage Assessment. In this project, four weirs were notched to provide low flow passage as a test project. The project was funded by SRFB and the Confederated Tribes of the Umatilla Indian Reservation through BPA.

Nutrient Enhancement, Tucannon River

In February, TSS assisted WDFW in distributing 100 steelhead carcasses in portions of the upper Tucannon River to promote the ecological environment necessary to support salmon and steelhead rearing in that system.

Project Success Monitoring Through the Use of WHEP (Watershed Health Evaluation Procedure)

Teacher and student teams from eight regional public, private and alternative schools monitored over 20 riparian restoration sites from Asotin Creek in the east to the Touchet River in the west. Currently in year 14, this ongoing monitoring program provides students with hands-on science experience and teaches watershed health concepts. Participating teachers were trained in monitoring protocols, furnished with professional quality monitoring equipment. Workbooks and lab manuals were provided for student use. Students measured water temperature, stream flow, dissolved oxygen, pH level, macro invertebrate



Walla Walla High School students sample macroinvertebrates to assess Mill Creek water quality.

presence, stream bank profiles and canopy coverage at their assigned project site. Each year students dedicate approximately 1,000 hours towards data collection.

Education and Outreach

Salmon in the Classroom and Hatchery / Habitat Field Trip

Since 1997, Tri-State Steelheaders and WDFW's Tucannon Fish Hatchery have partnered with local teachers to raise several hundred fish from egg to fry in Walla Walla classrooms. This year at Garrison Middle School and Walla Walla High School students observed the development cycle of fish eggs in 55 gallon aquariums. The program allows students to witness first-hand the dynamic changes these fish undergo during their first few months of life.

In the fall of 2011, 40 Garrison Middle School seventh grade students toured the Lyons Ferry Hatchery Complex on the Snake River to view first-hand the science and technology being used to propagate fall Chinook salmon. The group saw salmon being sorted, spawned and screened by WDFW biologists and technicians. Students next visited the Lyons Ferry KOA Campground and Marina where owner/manager Jim MacArthur explained the economic benefits and jobs created by local businesses as a result of salmon and steelhead fisheries. Students then travelled to the upper Tucannon River where they viewed examples of the natural instream habitat necessary for salmon to spawn and grow in the wild before migrating to the ocean. Dave Karl, Watershed Steward for WDFW, explained the importance of restoring habitat to ensure salmon populations can become sustainable through

naturally occurring ecological processes. Funding for the event was provided through a grant from the Lookout Foundation and RFEG funds.

Enhanced Flow Monitoring

TSS supported basin-wide stream flow monitoring efforts by assisting with flow measurements and regularly scheduled visits to six WDOE gaging stations.

Kids Fishing Day

Tri-State Steelheaders sponsored an annual Kids Fishing Day designed to bring families together to enjoy the outdoors and to introduce local youth to a life-long sport that supports conservation of natural resources. The annual Kids Fishing Day at Bennington Lake in Walla Walla was held on free fishing weekend in June. Tackle, bait, rods and reels were available for kids at no cost. Young anglers competed for prizes in a casting contest and enjoyed free hot dogs and soda. This event was made possible by the



Walla Walla High School students test water quality in Mill Creek.

collaboration of many volunteers, businesses, TSS Board Members and the WDFW, U.S. Forest Service and U.S. Army Corps of Engineers.

PROJECT PARTNERS

AmeriCorps - Asotin High School - Berney Elementary School - Blue Mountain Land Trust - Bonneville Power Administration - Burbank High School - City of Walla Walla - Clarkston High School - Confederated Tribes of the Umatilla Indian Reservation - Cooperative Trout Enhancement Program - DeSales Catholic High School - Garrison Middle School - Lincoln High School - Knowles

General Contracting ~ Kooskooskie Commons ~ Lyons Ferry Hatchery Complex ~ National Fish and Wildlife Foundation ~ National Marine Fisheries Service ~ National Park Service ~ Palouse Community School ~ Pepsi-Cola of Walla Walla ~ Prescott High School ~ Snake River Salmon Recovery Board ~ Touchet Elementary School ~ Touchet High School ~ U.S. Army Corps of Engineers ~ U.S. Fish and Wildlife Service ~ U.S. Forest Service ~ Waitsburg Elementary School ~ Walla Walla Community College Water and Environmental Center ~ Walla Walla County ~ Walla Walla County Conservation District ~

Walla Walla High School ~ Walla Walla University ~ Walla Walla Juvenile Justice Center ~ Walla Walla Watershed Management Partnership ~ Washington Department of Ecology ~ Washington Department of Fish and Wildlife ~ Washington Recreation and Conservation Office ~ Washington Salmon Recovery Funding Board ~ Whitman College ~ many additional local and regional landowners, businesses and individuals that supported Tri-State Steelheaders Salmon Enhancement Group in its role as a Regional Salmon Enhancement Group.

Region 13: Tri-State Steelheaders Salmon Enhancement Group - Financial Summary

| Project Name | RFEG Funds | Volunteer Hours | Volunteer Dollars | Other Funds | Total Spent |
|---------------------------------------|------------------|-----------------|-------------------|------------------|--------------------|
| Administration | \$79,314 | \$297 | \$6,227 | | \$85,837 |
| Bridge to Bridge | | | | \$6,470 | \$6,470 |
| RFEG Coalition | \$3,824 | | | | \$3,824 |
| Community Outreach and Education | \$10,178 | \$21 | \$441 | | \$10,640 |
| Creating Urban Riparian Buffers | | \$1,183 | \$24,848 | \$41,916 | \$67,947 |
| George Creek | | | | \$5,438 | \$5,438 |
| Mill Creek Passage: Flume Transitions | | | | \$610,198 | \$610,198 |
| Mill Creek Sills Passage | | | | \$221,006 | \$221,006 |
| Project Development and Monitoring | \$57,253 | \$478 | \$10,033 | | \$67,764 |
| Enhanced Flow Monitoring | | | | \$6,264 | \$6,264 |
| <i>Total</i> | <i>\$150,570</i> | <i>\$1,979</i> | <i>\$41,549</i> | <i>\$891,292</i> | <i>\$1,085,389</i> |

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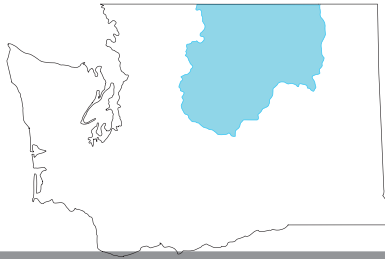
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Administrative Assistant, Cheryl Cockerline
Outreach Coordinator, Steve Gwinn
CURB Program Coordinator, Tara Patten



REGION 14: Cascade Columbia Fisheries Enhancement Group



**FISHERIES ENHANCEMENT
GROUP**

CONTACT INFORMATION:

**Cascade Columbia
Fisheries Enhancement Group**

PO Box 3162

Wenatchee, WA 98807

Office Phone: (509) 888-7268

Cell: (509) 476-3444

E-mail: Jason@ccfeg.org

Website: www.ccfeg.org

Mission Statement

The Cascade Columbia Fisheries Enhancement Group is a non-profit organization working within Chelan, Douglas, Okanogan and Ferry counties to cooperatively facilitate sustainable fisheries enhancement projects for future generations. Our work is based on public trust, outreach, voluntary participation of willing landowners, best available science and best value management practices.

Overview

As a community based salmon recovery organization the Cascade Columbia Fisheries Enhancement Group (CCFEG) provides assistance to landowners for habitat restoration and stewardship, and supports outreach and education activities in our community. At our annual retreat the CCFEG Board adopts a strategic plan which guides our habitat restoration projects and education and outreach activities. CCFEG projects include: fish passage, in-stream, riparian planting and fencing, biological and engineering assessments, alternative stock-watering techniques, irrigation water source replacements, watershed planning, nutrient enhancement, school and community group projects and more.

Partnerships and collaboration is the key to our success. The roles of these partnerships vary by project or program and may include: funding, resource sharing, technical assistance and collaboration.

We participate in the Watershed Action Teams (WAT) and Salmon Recovery Funding Board (SRFB) processes in the Okanogan County/Colville Confederated Tribe and Chelan County Lead Entities.

In addition to paid staff time, our volunteer Board and other volunteers have greatly contributed to our accomplishments. Thank you!

Project Highlights

Driscoll Island Riparian Planting

Lands in the Okanogan Valley have been utilized for agriculture for many years. Many stream banks are lacking natural riparian

vegetation as a result. Healthy, mature riparian vegetation such as cottonwoods and red-osier dogwood provide shade, bank stability, sources of wood for in-stream habitat, hiding cover and many other benefits to salmon. This project, near the confluence of the Okanogan and Similkameen Rivers, helps address limiting factors (water temperature and habitat complexity) identified in the Upper Columbia Salmon Recovery Plan by planting 1,000 feet of riparian vegetation along the Similkameen River.

Partner (and landowner): WDFW. Funding provided by NFWF. Completed: June 2012

Driscoll Island Cold Water Refuge – Design

This project is an opportunity to investigate sources of cool water and to design off-channel refuge for juvenile salmon and steelhead. These channels would be available during a critical time of year when water temperatures in the main-stem Okanogan and Similkameen rivers are not favorable to salmonid growth and survival. High temperatures currently drive these fish to less favorable habitats and can result in mortality. Our objective collect information about ground water availability to determine if, and to what extent, creating off channel habitat is feasible.

Partners: Colville Confederated Tribe and WDFW. Funding provided by SRFB. Expected completion: June 2013



Earthcorps crew planting native riparian vegetation along the Napeequa River, Chelan County

Napeequa Riparian Planting and White River Interpretive Trail

This project is located at the confluence of the Napeequa and White Rivers on the 133 acre Tall Timber Ranch. Tall Timber Ranch (TTR) hosts 6,000 guests

during the year, including youth of various ages and adults in camps throughout the year. In the fall, TTR hosts approximately 1,000 students from middle schools who come from for multi day camping and outdoor education experiences. The objective of this project was to restore native riparian vegetation along approximately 600' of the Napeequa River and install six interpretive signs along the White River on existing trails. Topics for the signs include: Native American and settlement history in the basin, the salmon life cycle, native fish species, local geology/ glaciation and river processes including the importance of floodplains and wood. Restoring native vegetation along the Napeequa River improves habitat for fish and wildlife, and helps naturally stabilize the eroding bank.

Partners: Tall Timber Ranch, Chelan Douglas Land Trust, with funding from the SRFB. Completed: June 2012.

Nutrient Enhancement Feasibility Study



CCFEG is working to utilize these fish for nutrient enhancement to boost primary productivity in streams once teaming with spawning (and dying) salmon.

The purpose of this project was to investigate logistical and technical aspects of collecting, storing, screening, transporting and distributing excess hatchery-origin salmon carcasses throughout the Upper Columbia, including the Wenatchee, Entiat and Methow basins. This report provides useful logistical information for stakeholders interested in implementing nutrient enhancement in the Upper Columbia salmon recovery region.

Partners: Yakama Nation, WDFW, Trout Unlimited – Washington Water Project, WDOE, USFWS. Funding provided by Chelan PUD/Rock Island Tributary Committee. Completed: November 2011



Napeequa planting shortly after completion, Fall 2011

Wenatchee Nutrient Assessment – Treatment Design

The objective of this project is to determine the need for conducting nutrient enhancement in high priority tributaries in the Wenatchee basin (Nason Creek, Little Wenatchee, White and Chiwawa Rivers) consistent with the Upper Columbia’s Biological Strategy. Our goal is to evaluate baseline conditions within the anadromous zone (water quality, periphyton, macroinvertebrates, etc.), establish goals or budgets for these indicators, develop a treatment and monitoring plan and secure approval from Washington State Department of Ecology (DOE) for a pilot nutrient enhancement program in the Upper Wenatchee.

Partners: Trout Unlimited – Washington Water Project, Water Quality Engineers, WDFW, USFWS, WDOE. Funding provided by: Yakama Nation, HCP Tributary Committee, Priest Rapids Coordinating Committee and the Salmon Recovery Funding Board. Expected completion: July 2013

White River Large Wood Atonement

The objective of the White River Large Wood Atonement project is to accelerate floodplain recovery and enhance in-stream function in the lower White River. This project improves habitat for all salmonids that utilize the lower White River including: spring Chinook, steelhead, sockeye and bull trout throughout the 3+ mile treatment reach. This will be accomplished by installing vertical LWD pieces in specific locations to collect and increase the retention time of wood that floats through the system.

Partners: Chelan Douglas Land Trust, WDFW, USFWS. Funding provided by: USFWS, HCP Tributary Committee and SRFB. Expected Completion: December 2014

Family Forest and Fish Passage Projects

CCFEG recently teamed up with the States Family Forest and Fish Passage Program to design and build two fish barrier connection projects, one in Chelan County and one in Okanogan County. These projects open habitat for native trout species, reduce the risk of road failure and improve the delivery of fine sediment. These projects benefits native fish and alleviates financial burdens to small forest landowners.

Wenatchee River Salmon Festival

The Salmon Festival is an outdoor education event that connects youth and families to nature by teaching about our natural resources and the incredible environment in which we live. CCFEG assists in a number of educational programs at Salmonfest, as well as running our own education and outreach booth. Typically this event draws 10,000 visitors.



Entrance kiosk at the interpretive trail along the White River, Chelan County. Topics include human and glacial history of the area, river dynamics, native fishes and salmon lifecycle.

Salmon Life Cycle Landscape

In cooperation the Leavenworth National Fish Hatchery, Trout Unlimited – Icicle Chapter, Friends of NW Hatcheries and funding from NCW Community Foundation and the Icicle Fund, we’re developing plans for an interactive, outdoor exhibit which represents the profound migration of the salmon’s lifecycle. The landscape will represent the cultural and ecological importance of salmon and supplement existing educational programs provided by the hatchery and help balance the message about the origin of salmon (streams v. hatchery raceways).

Twisp Salmon Celebration

Inspired by the Wenatchee River Salmon Festival this educational community event honors the teamwork and community support involved in restoring salmon in the Methow. Interactive activities for youth and adults abound and are followed by a salmon bake and potluck dinner.

Other Community Events

Thanks to the hard work of our AmeriCorps Intern, Nic McDonald, we held four free community events in Leavenworth and Twisp. In March 2011 we hosted author, professor and fisherman, Dennis Dauble, who shared his knowledge of native fishes of the Columbia Basin and the

cultures that relied on them. In June 2012 we hosted two free movie nights and presented a couple of wonderful PBS documentaries; Grand Coulee Dam “The Biggest Thing on Earth” and Salmon – Running the Gauntlet. Thanks to our partner Wenatchee River Institute (formerly Barn Beach Reserve).

PUD/Dam Wood Collection

Over the past year CCFEG has been working with the local Public Utility Districts, who operates the Columbia main-stem dams (Wells, Rocky Reach and Rock Island) and exploring uses for wood that collects at their facilities. Currently this woody material is removed annually, chipped and disposed.

Region 14: Cascade Columbia Fisheries Enhancement Group - Financial Summary

| Project Name | RFEF Funds | Volunteer Hours | Volunteer Dollars | Other Funds | Total Spent |
|---|--------------------|-----------------|-------------------|-------------|---------------------|
| Admin and office expenses | \$89,251.57 | 288 | \$4,608 | | \$93,859.57 |
| Partnerships and Project Development | \$26,130.79 | | | | \$26,130.79 |
| Habitat Projects Assessment, Restoration and Monitoring * | \$1,600 | | | | \$1,600 |
| Education and Outreach | \$1,875.45 | | | | \$1,875.45 |
| Training, Travel and Conferences | \$5,047.69 | | | | \$5,047.69 |
| <i>Totals</i> | <i>\$31,278.48</i> | <i>288</i> | <i>\$4,608</i> | | <i>\$128,513.50</i> |

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AmeriCorps Intern, Nic McDonald



A lot of dam wood. Seen here an annual removal operation at Wells Dam on the mainstem Columbia



Regional Fisheries Enhancement Groups Coalition

*Supporting and advocating for the RFEGs missions
to protect, restore and enhance the salmonid
resources of Washington State*

The 14 Regional Fisheries Enhancement Groups (RFEGs) formed a Coalition in 2003. The mission of the Regional Fisheries Enhancement Groups Coalition (Coalition) is to serve and represent the RFEGs by supporting and advocating for their missions to protect, restore and enhance the salmonid resources of Washington State.

The purpose of the Coalition is to:

- To speak with one voice, to represent our accomplishments
- To interface with other groups, agencies, and legislators on salmon recovery issues

The Coalition is comprised of a representative from each Regional Fisheries Enhancement Group. Our Coalition works to promote understanding of the value of the RFEG program.
salmon recovery efforts.

Compilation of this Annual Report was funded by the RFEGC

*For more information on the Regional Fisheries Enhancement Groups Coalition,
please see our website at www.rfeg.org.*





<http://wdfw.wa.gov/about/volunteer/rfeg/>

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600 Capitol Way North, Olympia, WA 98501.

Website: wdfw.wa.gov

Phil Anderson, Director, Washington Department of Fish and Wildlife.

Miranda Wecker, Chair, Washington Fish and Wildlife Commission.

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Regional Fisheries Enhancement Program

Annual Report for July 1, 2011 - June 30, 2012