Nearshore, A Priority for Salmon Habitat Restoration in Puget Sound

As population growth increases in the region more people are drawn to live near the Puget Sound transforming the natural shorelines into developed ones. In recent years, scientific experts and resource managers have identified an overarching importance of these shoreline habitats and have started to develop some ecosystem restoration guidelines and recommendations.

These nearshore environments have been identified as an important factor for the survival of both adult and juvenile salmonids, including Chinook. The South Sound provides much needed rearing habitat for salmonids from many other watersheds within Puget Sound. Other species of fish also utilize these beaches for spawning and refuge areas. Surf smelt and sand lance (often called forage fish) typically spawn in the sand and gravelly beach substrate during high tides.

Often times, bulkheads and armored shorelines reduce the natural erosion processes that would provide sufficient gravel and sand substrate to functional spawning beaches. Salmon rely heavily on forage fish as prey resources.

SPSSEG and partners are currently working with several South Sound shoreline landowners to replace (or modify) non fish friendly bulkheads and other types of shoreline restoration.

The bulkhead pictured below (and right) is located near Frye Cove and is about 110' long and encroaches on the beach. The proposed SPSSEG restoration project is to remove all the backfill, eco-blocks, and to re-create the natural beach profile. The concept will utilize boulders, LWD, and gravel to improve the surrounding beach habitat.

Many bulkhead removal and/or modification projects will reduce the existing fill footprint and increase beach continuity. SPSSEG is also interested in working on other types of nearshore restoration projects such as riparian plantings, tidal culvert removal, large woody debris placement, and beach gravel nourishment. There are local, state, and federal grants available that can cover 85% to 100% of the total project cost.

SPSSEG is in the midst of a project funded by the Salmon Recovery Funding Board to identify nearshore restoration projects in several south Sound areas.

Please call 360-412-0808 for assistance if you have any project ideas on your property or shoreline. We'd love to help you help the fish!

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South Puget Sound Salmon Enhancement Group

The SPSSEG is a non-profit volunteer-based organization that conducts salmon restoration, salmon enhancement and community education to increase salmonid populations in the South Puget Sound Region.

The SPSSEG is one of fourteen Regional Fisheries Enhancement Groups created in 1989 by the Washington State Legislature. The Regional Fishery Enhancement Program is partially supported by surcharges on sport and commercial fishing licenses. The Washington Department of Fish & Wildlife provides technical and administrative support to the program.

The SPSSEG is administered by a volunteer board of nine directors elected by the general membership.

Joe Williams—President
retired DOE

Terry Wright—Vice President
NWIFC

Richard Johnson—Secretary
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Dan Wrye— Treasurer
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Blake Smith—Board Member
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Marc Wicke—Board Member
Tacoma Power

Vacant—Board Member

How to get involved?
Attend the SPSSEG General Membership or Board Meetings.
Volunteer on projects or inform us of your salmon habitat restoration project ideas.

Thank you for your support!

Thank you former Board Member Sally Hicks
By Joe Williams, President of SPSSEG Board

SPSSEG wants to express its sincere thanks and appreciation to Sally Hicks for her service on the Board of Directors. Sally recently announced her departure from the Board. Sally began her association with the SPSSEG in 1992 when she worked on salmon restoration projects involving the Nisqually estuary. Her involvement intensified in 1997 when she coordinated the start up of the Kennedy Creek Salmon Trail. Her untiring efforts to bring landowners, funding sources, and the organization together were instrumental in creating the popular salmon trail; a SPSSEG project that educates and informs thousands of people each fall. Recently, Sally spearheaded the creation of a Kennedy Creek poster that is used for educational purposes and will be augmented with a fourth grade education curriculum. Sally also served as our interim Operations Director in the summer of 2004.

Sally became a board member in 2003, and until her departure in June, was our Vice President. Her involvement in Board of Director discussions was enlightened and often spirited as she pushed for projects and policies that would continue to support the mission of the organization. We look forward to continuing our work with her in the future.

Introducing SPSSEG Staff, New and Old

SPSSEG staff from left to right on top: Lance Wineck, Christine Garst, Jason Lundgren, Teresa Moon, Cheryl Mongovin, below: Geneva Karwoski, Kristin Williamson
Salmon Poisoning Disease by WSU Veterinary Medicine

Fishing can be wonderful recreation, but sharing the catch with your dog can be an act of kindness that kills.

Salmon Poisoning Disease is a potentially fatal condition seen in dogs that eat certain types of raw fish. Salmon (salmoid fish) and other anadromous fish (fish that swim upstream to breed) can be infected with a parasite called Nanophyetus salmincola. Overall, the parasite is relatively harmless. The danger occurs when the parasite itself is infected with a rickettsial organism called Neorickettsia helminthoeca. It's this microorganism that causes salmon poisoning.

"Salmon poisoning occurs most commonly west of the Cascade mountain range," says Dr. Bill Forrey, a veterinary parasitologist at Washington State University's College of Veterinary Medicine. He adds, "Canids (dogs) are the only species susceptible to salmon poisoning. That's why cats, raccoons and bears eat raw fish regularly with out consequence."

Generally clinical signs appear within six days of a dog eating an infected fish.

Common symptoms of salmon poisoning include:
- Vomiting
- Lack of appetite
- Fever and diarrhea
- Weakness and swollen lymph nodes
- Dehydration

Continued on next page:

“Salmon People” and Peter Donaldson come to Olympia’s State Theater

During October the South Puget Sound area was treated with several live performances of Peter Donaldson’s “SALMONPEOPLE”. With ferocious charm, inquisitive humor, good science, wild storytelling, and astounding “before-your-eyes” cartography, Peter Donaldson’s richly entertaining show reveals the interdependence of salmon and people in the once and future saga of our northwest bioregion. The story is told through a modern day everyman named Cyrus who finds himself employed up at the local dam driving a salmon taxi to transport spawners up past where a fish ladder never got built. By nature a curious man, Cyrus’ self-taught lessons in economics are a triumph of the vernacular, an arresting synthesis in the name of common sense for the common good.

All in all, nearly 1,300 people attended the 9 performances in Olympia. If you missed this show and still want to catch it, you are in luck! Peter will be attending our upcoming SPSSEG annual meeting and will perform excerpts of “SALMONPEOPLE”. The staff here at SPSSEG encourage everybody to see this presentation at least once, maybe even twice! Please attend our Annual Meeting on January 26, 2006 at Tacoma Public Utilities (TPU). Our thanks goes out to all of the other local sponsors who helped bring this great show to Olympia.
Kennedy Creek Salmon Trail Update

This past spring SPSSEG received funding from a WDFW grant to complete stations #10 and #11 at the Kennedy Creek Salmon Trail. These stations and interpretive signage were part of the original trail plan conceived in the late 1990's but were dropped early on in the planning stages due to lack of funding. The new stations will educate the public about fish friendly culverts and general forestry practices. Caitlin Braymer, SPSSEG’s Washington Conservation Corps (WCC) intern was assigned the task of overseeing the design and construction of the trail and interpretive trail signs.

Shawn Zaniewski’s Shelton based WCC crew volunteered to build the trail addition as part of their WCC community service project. For one week a year each WCC crew works on a project that will benefit the community. WCC will pay for the crew’s labor instead of the project sponsor. The trail was completed just in time for the 2005 season. Thanks again to WCC for their support and efforts.

The Kennedy Creek Salmon Trail (KCST) was another huge success in 2005. This year, 44 docents volunteered to be trail guides for many school groups during the week and for the general public on weekends.

Over 5,000 people took advantage of the early November rains to view natural spawning chum salmon in Kennedy Creek. Early estimates for the run size are approximately 30,000 chum. The typical peak for chum spawning is mid-November. Only a handful of coho have been observed in the creek so far.

SPSSEG and MCD (along with numerous partners including Taylor Shellfish United) will continue to improve the trail and provide a truly unique Northwest experience to the area. If you haven’t visited the Kennedy Creek Salmon Trail yet, you’ll have to wait until next fall (sorry).

Along with SPSSEG staff, Karin Strelowi and Mason Conservation District helped coordinate the trail this year (our thanks to MCD).

Many thanks to the Shelton based WCC crew! Crew members from left to right include: Connor Nakao, Shawn Zaniewski (Crew Leader), Phillip Swenson, Jessica Garret, Seated: Nika Butler, and Kate Halstead.

Salmon Poisoning, Continued from previous page:

If untreated, death usually occurs within fourteen days of eating the infected fish. Ninety percent of dogs showing symptoms die if they are not treated. Thankfully, salmon poisoning is treatable if it’s caught in time. A key to its diagnosis is telling your veterinarian that your dog ate raw fish. If you have a dog that wanders, or raids trashcans and you are unsure of what it’s eaten; consider the possibility of salmon poisoning. Salmon poisoning can be diagnosed with a fecal sample or a needle sample of a swollen lymph node. Detecting the parasite’s eggs as they are shed in the feces confirms its presence. The combination of symptoms, and the presence of parasite eggs or the rickettsial organisms, are enough to justify treatment.

Given the severity of the condition, treatment is relatively simple. Your veterinarian will prescribe an antibiotic and a “wormer”. The antibiotic kills the rickettsial organisms that cause the illness, and the wormer kills the parasite. If the dog is dehydrated, intravenous fluid are given. Once treatment has been started, most dogs show dramatic improvement within two days. Next time you are fishing or purchase raw salmon and you hear the familiar begging whine of your dog, ignore it. They may not understand it, but not sharing the fish is the best thing for them.

This will save them from suffering salmon poisoning, and save you from a veterinary bill.

By Sarah Hoggan, WSU College of Veterinarian Medicine
Mashel River Assessment Monitoring
by Teresa Moon

Every summer we load up the jeep with gear and staff and head out to the Mashel River near Eatonville. Since 2002 the South Puget Sound Salmon Enhancement Group (SPSSEG) and the Nisqually Tribe have been using the Timber-Fish-Wildlife (TFW) Monitoring Program Methods (Pleus et al. 1999) to complete effectiveness monitoring on the lower 1.6 miles of the Mashel River. A Mashel River Watershed Analysis, completed by the Department of Natural Resources in 1997 found the lower reach of the Mashel River lacking in quantity and quality of pool habitat and substrate. The wood quantity was also found to be poor to fair with most of the wood not influencing the channel.

In 2004 SPSSEG and the Nisqually Tribe added Large Woody Debris (LWD) to the Mashel River in an effort to diversify the habitat for salmon. The project involved the placement of 7 log jams in the lower 0.7 miles of the Mashel River in August 2004. Large supplemental riparian plantings were also a part of this Salmon Recovery Funding Board (SRFB) project. LWD was strategically placed in this reach to help promote gravel sorting, pool creation, increase cover, and reduce bank erosion. The wood placement is expected to benefit multiple life stages of Chinook, coho, and steelhead. A newly funded project (January 2005) through the SRFB will continue our efforts to increase LWD in the Mashel River. This project will add several engineered log jams (ELJ's) in the Mashel River within the Eatonville area. The effectiveness monitoring will be expanded this summer to include this reach of the Mashel as well. To determine changes in river morphology and salmonid abundance due to the LWD placements, an effectiveness monitoring plan was developed prior to the habitat enhancement project. Changes will be determined by comparing data collected in the treatment reach and the control reach before and after the LWD placement.

Completed log jam after two years.

The Mashel River effectiveness monitoring plan will test the following alternative hypotheses:

1) LWD addition will result in increased LWD retention for treatment reach.
2) LWD addition will increase overall habitat diversity in treatment reach.
3) LWD addition will increase holding, spawning, and rearing habitat in treatment reach.

Reference Point surveys were conducted in 2002. LWD, Habitat Unit, Chinook redds counts, and juvenile abundance surveys were conducted in 2003, 2004, and 2005 to test these hypotheses. Surveys will continue to be completed each summer to compare the changes in the data prior to and after the LWD placement.

Please contact Teresa Moon at 360-412-0808 if you would like more details regarding the monitoring protocols, SRFB projects, or data collected.

Snorkeling for Juvenile Salmon in the Mashel River Monitoring Reaches. Photo by Teresa Moon
Thank You To Our 2005 Volunteers and Interns

SPSSEG would like to thank Caitlin Braymer and Washington Conservation Commission (WCC) for interning with our group during 2004-05. Caitlin completed numerous projects while working with SPSSEG including education and outreach, organizing the Kennedy Creek Trail stations 10 and 11, participating during the Kennedy Creek Trail, and conducting an implementation monitoring program for completed projects. Caitlin is currently back at school at The Evergreen State College in Olympia. Good luck and thank you Caitlin.

SPSSEG would also like to thank several other interns who volunteered for our group this past year; Will Morris, Kelii Jackson, John Roar, Devon Boyles, and Noryany Muhamed. We utilized our interns to create an Access database, complete project implementation monitoring, and to assess barrier culverts in South Sound.

SPSSEG does occasionally provide volunteer internship opportunities to local students. Please call if you are interested.

From left to right: Devon, John, and Caitlin learning the protocol necessary to complete Level B culvert assessments.

SPSSEG 2005 Construction Highlights and Future Grants

This past summer SPSSEG once again completed numerous salmon habitat restoration projects all across our service area. In all, SPSSEG either partnered or sponsored 8 on-the-ground projects including (Minter Creek, Little Minter Creek, McDonald Creek #1 and #2, Bishop Creek, Sportsmen's Oxbow, Adams Creek, and Wynne Creek). The Group is also involved in several long term monitoring and assessment projects in the fresh water and nearshore areas.

SPSSEG has benefited from many positive partnerships with local, state, tribal, and federal agencies. A few of these agencies include: Mason County, Pierce County, WDFW, USFWS, NOAA, WADNR, Salmon Recovery Funding Board, Stream Team, Puyallup Tribe, Nisqually Tribe, Squaxin Tribe, NRDA, USFS, WSDOT, Conservation Districts, Sportsmen's Club Association, and several other organizations.

The Sportsmen’s Oxbow project (left) on the Puyallup River was a prime example of partnering with many others. Several different agencies and partners contributed funds and efforts to complete this project in 2005. Without the help of many, the project would have failed. This project opened up about 15 acres of prime off-channel rearing habitat near river mile 14.

Future Grants

SPSSEG is also awaiting decisions for several grant programs including the Salmon Recovery Funding Board, National Fish & Wildlife Foundation, US Fish and Wildlife Service, and Family Forest Fish Passage Program. These grant programs are crucial for SPSSEG to serve the community and provide salmon restoration on the South Sound. Without these grant programs there would not be project funding. In total, SPSSEG has requested about $1 million in grant funds to complete more restoration projects within our service area. Typically, most of these grant funds are re-distributed among the local economy with purchased goods, contractors, and professional services.

Minter Creek (right) was a successful project on the Kitsap Peninsula that increased access to over 7 miles of habitat on Minter Creek. In total, SPSSEG completed 5 projects within the watershed.
Annual Meeting January 26, 2006
At Tacoma Power Auditorium
Don’t Miss Out!

You are invited to attend the South Puget Sound Salmon Enhancement Group’s 15th Annual Meeting and celebration of accomplishments. This year’s event will be held on January 26, 2006 at the Tacoma Public Utilities (TPU) Auditorium in Tacoma from 6:00 pm to 9:00 pm.

The guest speaker will be renowned performer and salmon historian Peter Donaldson. Peter will perform excerpts from his hit one man show “SALMONPEOPLE”. Peter recently performed to over 1,300 people in Olympia and also delights audiences all across the Northwest and Canada. The show is very entertaining and tells a great story about nature and yes….salmon.

There will also be a presentation highlighting SPSSEG’s 2005 local and regional accomplishments. Light snacks and beverages will be provided. The auditorium is large, so plenty of interested members and public can attend this event. There will also be a Kennedy Creek Salmon Trail fundraising raffle. Please come to our event and learn more about SPSSEG and Puget Sound salmon restoration. Please call SPSSEG for directions or more information. See you there!

Show Your Support! Join SPSSEG Today A One Year Individual Membership is Only $15 and is tax deductible. Why wouldn’t you? Good salmon karma and a shirt is guaranteed!

South Puget Sound Salmon Enhancement Group
Membership

Name ________________________________

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☐ Individual Membership……………………………………..$15

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Please Return form to: SPSSEG 6700 Martin Way East, Suite 112
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SPSSEG Nearshore Education & Shoreline Restoration by Lance Winecka

Last spring SPSSEG hosted a nearshore walk and BBQ at Tolmie State Park just outside Olympia. SPSSEG would like to thank Tolmie State Park, Curtis Tanner (US Fish and Wildlife Service), and Doug Myers (Puget Sound Action Team), for providing their expertise during this local event. The beach walk was organized by SPSSEG to highlight the importance of nearshore and shoreline habitats for salmon and other Puget Sound marine organisms. We would like to provide additional educational opportunities and support for landowners who may live along these diverse and complex shorelines. SPSSEG is in the midst of identifying nearshore projects located in the South Sound. If you think you have possible nearshore project please let us know. We do have limited amounts of funding to target these beneficial projects in high priority shoreline restoration areas. SPSSEG can help nearshore landowners in South Sound!

Scott Stelzner and Kristin Williamson shown working on a WRIA 13 and 14 nearshore assessment in South Sound.

Doug Myers (right) demonstrates flora and fauna diversity on a beach at Tolmie State Park.

SalmonGram
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