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SPSSEG is administered by a nine-member volunteer board elected by our general membership at the Annual Meeting.

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Cover: Midway Creek juvenile trout Photo: Brian Combs

### Message from the Executive Director

Lance Winecka



Dear SPSSEG Supporter,

This summer SPSSEG will be transitioning to more electronic formats to keep in better touch with our members and supporters. Our 'Salmon Gram' newsletter will now only be available online and via email. We will be printing out very few newsletters to reduce our paper footprint and also printing costs. We will be using an email service called "Mail Chimp" that will provide quarterly updates about upcoming activities and our organization. Please send us an email at spsseg@spsseg.org to be added to our email and distribution lists. You also might notice a post card in the US mail requesting your contact/email addresses. Please send back your email to be added on our list.

SPSSEG is also hiring our new WCC Individual Placement (IP) intern this summer. It's almost time to say good bye to Katie, our outstanding IP for 2011/12. She has done an incredible job re-building our education and outreach program. We are always looking for donations that help support this excellent opportunity through the Dept of Ecology. Our new WCC will come on board in late September!

Finally, a few weeks ago, I was fortunate enough to go fishing at Sekiu with some great friends. We spent a lot of time fishing, talking about fishing, and also how important salmon are for the overarching ecosystem. All of our complicated SPSSEG projects seem less difficult when you are sitting in a boat and talking about salmon issues amongst friends. I just wish that I had more time to go fishing. If I did, I'm sure that I'd catch more fish and projects would be even easier!

Thanks so much,

Lance

SalmonGram is published twice per year by the South Puget Sound Salmon Enhancement Group (SPSSEG), a 501(c)(3) non-profit, volunteer-based organization.

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

## Sequalitchew Creek: Revisited

By Lance Winecka

SPSSEG has been working with various stakeholders to create a broadly supported watershed restoration plan for Sequalitchew Creek. This restoration plan is funded by Cal Portland and is intended to provide a reasonable road map to increase water flow through a very large marsh system and to improve ecological function of the watershed. Sequalitchew Creek has a lengthy history of human impacts dating back to the mid-1800's and several of these legacy issues make restoration more challenging.

Stakeholders will be working in collaboration over the next several months to develop a plan that can work while still being supported by others. This is not an easy task. With each action, there might be unintended consequences and it's important to think through all of the alternatives and technical information as carefully as possible to ensure that any proposed project components will function as intended. A few of the significant issues that will need to be considered are the Joint Base Lewis McChord (JBLM) water diversion coming out of Sequalitchew Lake, beaver dams throughout the marsh system, a sewer line running through the middle of a marsh, water quality and storm water input, and placed-fill removal within the watershed. All of these issues have possible solutions and each one will be carefully considered by a "Core Group" consisting of representatives from the Nisqually Tribe, Department of Ecology, Cal Portland, the Environmental Caucus, City of DuPont, Pierce County, and a local community group called Sequalitchew Creek Watershed Council. This Core Group will ultimately make recommendations for actions to be considered later this winter. All of these meetings will be open to the public and interested stakeholders.

SPSSEG is serving as "staff" to the process and will be a neutral third party representative. Our goal is to create a plan that is collaborative, transparent and will be accepted by others. There will also be one more public meeting later this year to unveil a draft proposal that will be open for comments, criticism, and feedback. Please follow this project on our website to learn more about details of the upcoming meetings. The next Core Group meeting will be held on Sept. 6, 2012 from 1-4 p.m. at the City of DuPont City Hall. There will be an opportunity at each Core Group meeting for the public to comment.





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## 'Biologist for a day' at Penrose Point

By Katie Fulkerson

Penrose Point State Park on the shores of Carr Inlet is a 152-acre marine park offering two miles of shoreline for exploration. The park is home to a variety of marine and shoreline creatures such as seals, sea birds, clams, crabs, mussels, oysters, scallops, starfish, sculpins, salmon and more. Penrose exhibits key nearshore habitat features including: an active feeder bluff, mature riparian forest, surf smelt spawning, low sloping beaches that lead to a small eelgrass bed, and an estuarine embayment.

In the 1970's a 700-ft creosote bulkhead with rip rap protection was built. The bulkhead limits shallow water habitat at high tide, sits on top of potential surf smelt spawning habitat, prevents bluff sediment from entering the beach, and eliminated riparian fringe habitat for input of nutrients and wood.

SPSSEG and Washington State Parks will remove this bulkhead and restore this critical habitat this winter. The project will: reconnect bluff and riparian processes to the nearshore ecosystem, restore sediment transport process, improve the beach profile for rearing and foraging salmonids, specifically fry migrant Chinook, coho, chum and pink salmon, enhance forage fish spawning habitat around the project site, remove toxic creosote materials from the nearshore ecosystem, and improve public access to the beach. Funding for this project is provided by the Salmon Recovery Funding Board, Puget Sound Partnership, U.S. Fish and Wildlife Service, and Washington Department of Natural Resources.

Since nearshore restoration is a Puget Sound Action Agenda and West Sound Lead Entity priority and is key for salmon recovery, SPSSEG got the public involved. On Friday, August 3, we joined Pierce County Shellfish Partners, WS Dept of Fish & Wildlife, U.S. Fish & Wildlife, Greater Peninsula Land Conservancy, Pierce Conservation District, and Harbor Wild Watch at Penrose to talk about the importance of our shorelines. SPSSEG invited volunteers to participate in Restoration Biologist for a Day! Our volunteer biologists sampled 23-1ft² transects in front of the bulkhead and on the sandy spit that is supported by a more natural feeder bluff. Here is a snap shot of the amazing animals that we found!

First, there were a total of 3,282 organisms. The sandy spit tended to have more types of organisms, such as isopods, sanddollars, clams, mussels and chitons, than the area in front of the bulkhead, which was dominated by fucus and shore crabs. There was also more sea lettuce (*ulva*) in the sandy spit area while the bulkhead area had more rock weed and limpets. This is most likely due to the presence of more large rocks. Our popular finds included squid eggs and plain fin midshipman males guarding bright orangey yellow eggs. However, the top star was red octopus that had been caught high and dry on the beach. He was lovingly returned to the cold waters of the sound.



## Puyallup River Watershed

By: Kristin Williamson

The Puyallup River Watershed drains an area approximately 1,065 square miles and contains three major river basins: Puyallup, White, and Carbon Rivers. It is one of the largest watersheds in SPSSEG's region and supports native populations of White River Spring Chinook, Puyallup River Fall Chinook, coho, steelhead, chum, and pink salmon, cutthroat and bull trout. Development of the Puyallup River watershed and its tributaries began in the late 1800s with the filling of the estuary, construction of a system of levees, diversion of the White River into the Puyallup River in 1911, installation of 3 dams, and development associated with industry and urban growth across the lower watershed in Tacoma, Puyallup, Fife, Sumner, and Orting. The upper watershed is primarily contained within federal and private commercial timber land and is relatively intact, yet not without degradation of natural process due to timber harvest and construction of forest roads.

On June 14, Russ Ladley, Puyallup Tribe Resource Protection Manager, hosted SPSSEG staff and members for a status and trends presentation on the Puyallup River. Ladley outlined the issues affecting the watershed and the salmon populations it supports. Construction of Port of Tacoma reduced extent of the estuary by 98%, the system of levees in lower watershed channelized 39 miles of river, and land use practices impacted riparian buffers and created numerous fish passage barriers. Concerted efforts amongst Tribal, Federal, State, local agencies, and NGOs have made great strides to alleviate some of these stressors. With the Puyallup Tribe as a primary partner, the Port of Tacoma has reopened historic estuarine areas with projects like Gog-le-hi-te, and Place of Circling Waters. Counties and Cities have pulled levees back to reconnect the mainstem lower watershed with the floodplain. The Puyallup and Muckleshoot Tribes have partnered with SPSSEG, US Forest Service and private timber companies to remove roads from floodplains and reintroduce large wood structures to tributaries in the upper watershed. And the Tribe has worked with the US Army Corps of Engineers to improve fish passage and transportation around the Electron, the Buckely and Mud Mountain Dams.

In recent years, surging odd-year pink salmon runs has made fish transportation around Buckely Diversion and Mud Mountain Dams inadequate. The Buckely Diversion Dam is a small dam on the White River which diverts water into Lake Tapps and is impassable to fish. The Army Corp of Engineers transports fish by crowding them into a hopper which is lifted and dumped into a truck. The fish are driven 10 miles around Mud Mountain Dam and returned to the river. Mud Mountain Dam doesn't have a fish ladder and is 432 feet tall, so a trap and haul facility must be maintained to get fish to the upper watershed. During odd years, thousands of pinks return to the White River and overwhelm the trap. The salmon stack up for miles below the dam and pound themselves against the dam to the point of exhaustion. Given the timing of the salmon runs, listed White River Spring Chinook, and threatened coho salmon also fall fate to the back up at the dams.

Salmon crowded at Buckley
Diversion dam
Photo courtesy of Russ Ladley

The Tribes, the US Army Corps, and several other State and Federal regulatory agencies are working to find solutions to update the antiquated trap and haul system and safely salmon upstream. However, alternative systems are costly and funding mechanisms are challenging.

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Above: Perched dual pipe culverts



Above: New nine-foot fishway culvert being installed

Below: Installed fishway style culvert



# Midway Creek: Culverts in habitat restoration

#### By Brian Combs

Habitat restoration practices for fish and wildlife have evolved in the past two decades into a complex array of land management techniques supported by specific policy and funding mechanisms. The methods used to restore and enhance habitat for fish are many. Land is bought and protected, trees and vegetation are planted along river corridors, logs are placed in streams that have a paucity of this once abundant habitat-keystone, just to name a few of the more common restoration techniques. And yet for all our various tools and methods to restore balance to the water courses we humans have altered, there is one old-school approach that still has a lot of punch: correcting fish passage barriers. Most of these barriers are undersized or incorrectly placed culverts (pipes) that pass streams under roads and driveways, although some of the most damaging barriers are dams that inhibit fish migrations, such as the highly publicized Elwha River dams.

Collectively, the vast numbers of barriers in the state represent a lack of access to thousands of miles of stream habitat for fish and other aquatic species. Low estimates of the total number of barriers in the state are in the range of 30 to 40 thousand!

However, not all barriers are equal in terms of their potential damage to fish. Some passage barriers block fish access 100% of the time while others are deemed only "partial" barriers, inhibiting fish migration patterns only under certain conditions. Additionally, the size of the stream, the species utilizing the watershed and the location of the barrier relative to the stream's length are all factors to be considered

when assessing the severity of a fish passage barrier. With this in mind, restoration practitioners have already corrected many of the most obvious and most egregious barriers over the last two decades. The low-hanging fruit is mostly gone, so to speak. And thus the dilemma: how do we collectively and individually prioritize the remaining assemblage of fish passage barriers with scant time and money resources? It's a conundrum for sure and that's why SPSSEG jumped at the chance to work with Simpson Lumber to correct the Midway Creek fish passage barrier, a full-blocking culvert under the Simpson railroad that has prevented fish access to the creek for just about 100 years.

Midway Creek is a relatively small tributary to the larger Goldsborough Creek, which harbors one the best runs of Coho salmon left in South Puget Sound. Despite Midway Creek's size it has some key habitat elements that could benefit salmon and trout populations utilizing the Goldsborough watershed. Namely, it provides low to moderate spawning habitat but has excellent rearing habitat for juvenile fish in the form of coldwater beaver ponds and wetlands. These wetland rearing areas are particularly important to species such as Coho salmon, and trout, which typically stay in freshwater for at least one year before making their migration to saltwater. With this quality habitat being completely blocked by the perched culverts, Midway Creek just needed a little help to get fish into the existing but inaccessible habitat.

Although the concept for the project was a simple one – replace a barrier culvert with a new, better culvert, the logistical obstacles facing the project were many. First and foremost, the project site was located in the

woods, <sup>3</sup>/<sub>4</sub> of a mile away from the nearest road. The only way to get to the site was down the railroad tracks. Implementing the project would mean closing the Simpson rail line for up to two weeks while the new culvert was being installed, and that proposition represented a big economic and scheduling challenge for Simpson considering the fact the railroad is a key transport element for their lumber products. Further, the complex layers of permits, funding, required matching contributions, and scheduling restrictions all added up to make for a tough haul.

But as with many of our projects a little perseverance paid off and the project was successfully implemented on time and within budget. The stellar efforts of our partners combined with the great work of the contractor, and maybe even a touch of good fortune, allowed Midway Creek to become accessible for the first time in 100 years! The recent effort to complete this project started three years ago when our design team identified this as a high priority project, although the site has been on our radar for almost 10 years. We're not moving mountains here, but we are moving a lot of dirt. It's not as easy as it might seem but somehow we keep on pushing.

Thanks to all our partners who provided substantial financial and logistical support: Simpson Lumber LLC, Squaxin Island Tribe, Miles Sand and Gravel, and Green Diamond Resource Company, among others. Kudos to Arris Kollman Trucking for excellent installation and contracting services, and special thanks to Pat Powers, Waterfall Engineering LLC, for superb design services and engineering oversight.

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## McLane Creek: A local treasure under threat

By Adam Sant



Named after the William McLane family, who settled in the Delphi Valley in 1852, McLane Creek and its tributaries represent one of the most productive salmon watersheds in WRIA 13 (Water Resource Inventory Area). The 11.5 square mile McLane Creek watershed is comprised of the main-stem, East Fork and its tributaries; Beatty, Perkins and Swift Creeks. The headwaters of McLane Creek lie in the Black Hills where seeps and surface flows come together to create the cool and clean waters that make a 14.5 mile journey from peaks of almost 2,000 ft, to sea level where it enters Mud Bay and Eld Inlet.

Historically, the watershed was used by humans for hunting, fishing, and shellfish harvest. More recently agriculture, forestry and residential use dominate. Around 43% of the watershed is comprised of commercial and state forest lands with only 3% of the watershed considered urbanized. The basin contains a wonderful park, DNR's McLane Creek Nature Trail, along its lower reaches.

The last fish passage barrier on the main-stem of McLane Creek is planned for removal in partnership with the Family Forest Fish Passage Program (FFFPP), making access to this vibrant and productive watershed available to the many species of salmon it supports: Chum, Coho, Steelhead and the occasional Chinook. This watershed supports a host of wildlife and plant communities that rely on the bonanza of vital nutrients that the returning salmon bring.

However, while habitats and fish passage have greatly improved, another threat to the watershed exists: Japanese Knotweed (*Fallopia japonica*). Knotweed spreads by one piece drifting down stream to start a new infestations. Once established, it aggressively invades stream banks displacing native plant communities and increasing erosion. Knotweed offers little food or shelter to local wildlife. It forms dense stands up to 12 feet tall and has green or red mottled stems. Leaves are bright green, heart shaped, smooth edged and can range from 1 to 10" wide. It emerges in March-April and is full grown by mid July with spikes of small white flowers in late summer. It goes dormant in winter, storing food and energy in its rhizome that allows the plant to re-sprout and propagate.

So what to do? First, check your property and especially your stream and river banks for knotweed. Then, consider one of several control strategies such as: Manually dig roots and check for new sprouts regularly; Spray herbicide (carefully!); Hire a licensed herbicide professional; Call for help and assistance! (County Weed boards, Conservation Districts, and other organizations can be helpful); and lastly, avoid spreading knotweed fragments in machinery that end up falling into waterways where it can travel and spread!

## The Olympia Traverse: SPSSEG is "The One"



2012 Team Members: (above, left - right) Katie Fulkerson, Duane Fagergren, Lance Winecka and Jerilyn Walley

2011 Team: (below, left - right) Duane Fagergren, Kristin Williamson, Lance Winecka and Joe Williams

2010 Team: (not pictured) Duane Fagergren, Bill Taylor, Kristin Williamson and Lance Winecka



The past three years, SPSSEG has entered a team in The Olympia Traverse, a multi-sport adventure relay celebrating the life cycle of wild salmon. One can enter the race as a Chinook (solo), Coho (tandem team), or a Chum (relay team). Each year, Northwest Traverse, a non-profit organization, selects "*The One*" non-profit for the year as the beneficiary of the Traverse. *The One* receives a percentage of the surplus revenue from the event. This year, SPSSEG was *The One*!

The event was held on Saturday, July 22. Team Saves Salmon! was headed by our fearless leader Lance Winecka on the mountain bike, Jerilyn Walley on the road bike, board member Duane Fagergren in the kayak, and me, Katie Fulkerson as the runner.

The morning of the Traverse dawned bright and sunny, with each of us hoping that our previous months of training had been enough. We were competing against 20 Chinooks, 8 Coho, and 35 other Chums. The mountain bike course took Lance through 7.4 miles of Capital Forest. Jerilyn dominated the longest section of the race, riding 22 miles on the road bike. While some paddlers chose stand-up paddle boards, Duane decided his kayak was the best option. He was right; he finished the paddle section five minutes faster than the average time for that section! After receiving the baton from Duane, I dashed off to the Priest Point Park Loop. After passing three people, I was reunited with my team. We then finished the last leg of the race with a comfortable stroll, intent on seeking a cool beverage from Fish Tale Ale! In the end, Team Save Salmon completed the Traverse in 4 hours and 2 minutes!

The goal of the Olympia Traverse is to raise awareness of the salmon lifecycle and provide financial support to local non-profits. You can still support team "Saves Salmon!" by making an electronic donation via www.spsseg.org or sending a check to SPSSEG, 6700 Martin Way SE, Ste 112, Olympia, WA 98516.

Believe it or not, it is already time to start training for next year's event! We'll see you on July 27, 2013 at the Olympia Traverse!

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South Puget Sound Salmon Enhancement Group 6700 Martin Way East, Suite 112 Olympia, WA 98516

Please pass this newsletter on to a friend when you are finished. Thank you!

### "Kennedy Creek Salmon Splash"

a "fun" fundraising event

on

Sunday, September 9th, 2012 3:00 p.m. ~ 5:30 p.m.

#### with live music, food, and refreshments

\$35.00/person ticket, or 4 tickets for \$120, includes appetizers, shellfish, beverages, and dessert All Splash proceeds directly support the Kennedy Creek Salmon Trail Education Program

Every \$35 raised at Splash will support 10 student visitors

Park at the Kennedy Creek Salmon Trail Lot

Please RSVP to SPSSEG by September 5th, 2012

Co-sponsored by: Mason Conservation District Taylor Shellfish United

### South Puget Sound Salmon Enhancement Group Mission:

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