Stream Team

QUARTERLY NEWSLETTER • FALL 2007

"To the Bottom of the Sound!"

Haunted Hike 2007

Saturday, Oct. 20 • 3:30-6:30pm FREE!
Last hike leaves at 5:30pm
(Alternate "rain date" Oct. 27)
Priest Point Park Rose Garden
East Bay Drive NE, Olympia

•Plunge in and solve the mystery: Hoist the sails and join the crew of the Flying Dutchman as they journey to the bottom of the Sound with the Kraken, Davy Jones, Calypso, pirates and sea creatures. Find out why Budd carries the black spot and why Eld and Henderson are trapped in Davy Jones' locker. Who can free them, and how? Are you prepared to go to World's End to find the treasure and return it to Puget Sound?

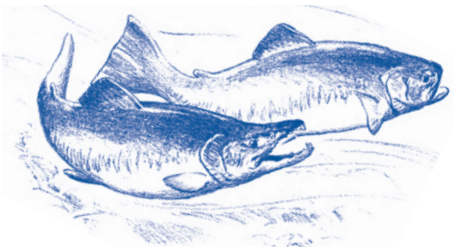
• Take part in educational activities, make and take crafts, and more!

• Volunteer! This popular event attracts over 900 visitors! 50 volunteers are needed to help with event staffing, setup, activities, props, and more. For more information, or to volunteer, call Patricia @ (360) 570-5841.

The 2007 Haunted Hike is brought to you by Stream Team, the Washington State Departments of Ecology and Fish & Wildlife; Thurston County Environmental Health; and City of Olympia Water Resources.

Content geared to ages 6 and up. Youth ages 15 & under must be accompanied by an adult.

Salmon Stewards Educate Visitors at Local Salmon Viewing Sites



After a long journey out to sea the salmon are returning home to spawn! As juvenile fish they traveled downstream from their birthplace to Puget Sound and out into the ocean. Along the way they encountered and survived many dangers. Now these amazing fish are returning home to spawn and die, ensuring that the circle of life continues for salmon and many other species of animals and plants.

Visit one of the popular salmon viewing sites in our area and get an up-close look at these wondrous fish as they head upstream. Chinook salmon are already passing under the 5th Ave. Bridge in downtown Olympia on their way up the Deschutes River toward Tumwater Falls.

See the calendar on page 3 for times and dates when Salmon Stewards will be on hand to answer questions.

(continued on page 2)

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STREAM TEAM
OLYMPIA • LACEY • TUMWATER
THURSTON COUNTY

Salmon Stewards *(continued from page 1)*

Left: *Warren Smith dresses up the Salmon Steward vest with an "Ask Me" sign.* ***Center & Right:*** *Salmon Steward Irene Lewis staffs the 5th Ave. Bridge.*

5th Ave. Bridge & Tumwater Falls Park: In September and October, Salmon Stewards will be on hand at the 5th Ave. Bridge fish ladder and Tumwater Falls Park to talk about the hatchery-run Chinook salmon that are returning to spawn. Talk with Salmon Stewards on Saturdays and Sundays from 10am-2pm, September through October.

McLane Creek Nature Trail: In November and December Salmon Stewards will be stationed at the footbridge along the McLane Creek Nature Trail (located off of Delphi Road) to answer questions about the wild spawning chum salmon. Talk with Salmon Stewards on Saturdays and Sundays from 10am-2pm. Salmon Stewards will also be available Thursday, November 22 & Friday, November 23 from 10am-2pm, making a visit to view salmon at McLane Creek a great activity to enjoy with visiting relatives. Bring a friend or bring the whole family and experience one of nature's wonders right here in South Puget Sound.

Each female chinook salmon lays an average of 5,000 eggs. Each female chum salmon lays between 1,000 and 4,000 eggs. Only about one in every 1,000 eggs survives to adulthood and returns home to spawn.

Welcome to New Salmon Stewards!

Classroom and field trainings, led by fish biologist Larry Phillips, veteran Salmon Steward and fish biologist Gary Sprague, and Larry Kessel of the Washington State Dept. of General Administration, prepared 16 new Salmon Stewards for this year's season – including three families! Welcome to Warren Smith; Irene Lewis; Kara and Rick Walk; The Williams Family: Greg, Susan, Katie, and Henry; Byron Yoshina; Nicki Johnson; Kathy Johnstone; Satori Stratton; Caren and Tatyana Gibbs; Lani Vento and Steve Parks.

Many thanks to experienced Salmon Stewards Kathy Evans, Linda Hurtado, Dennis Connolly, Brenda Griffin, Tom Dowell and Susan Camp who began stewarding in mid-August when the Chinook first made their appearance at the 5th Ave. Bridge fish ladder.

Experienced Salmon Stewards Verl Rogers, Ann Mataczynski, Chris Cooley, Donna Smith and Dennis Matsuda will also return this year.

Get "Chummy" with Salmon at this Free Public Talk

Chum Salmon and Their Amazing Blanket of Changing Colors and Patterns
Wednesday, Oct. 24 • 6-9pm
Thurston County Courthouse, Bldg 1, Rm 152

According to the Washington Dept. of Fish and Wildlife, chum salmon are the most abundant of the seven wild salmon species in Washington State. Remarkably, many chum salmon populations in Western Washington have remained resilient while other salmon species populations have declined substantially.

Chum salmon return to spawn in Puget Sound streams from early September through February. Only about one in every 1,000 chum salmon eggs survives to adulthood, which makes each adult chum we see in our streams a statistical rarity.

On October 24, Steve Schroder, a research scientist with the Washington Dept. of Fish & Wildlife, will give a free public lecture on the reproductive ecology of chum salmon. You'll learn what is required for chum to produce offspring and how social interactions among spawning fish can influence the number of offspring each fish is able to produce.

One of the most intriguing things about chum salmon is their ability to change their spawning colors in seconds. Chum use color patterns to indicate the social status of individual fish. During his talk, Steve will discuss what these patterns mean, as well as the ritualized fighting patterns males sometimes engage in while competing for females.

The lecture is designed to provide Stream Team members with basic information about spawning chum salmon that they can share with others. Bring your questions and join us!

October

October 7 • 10am-4pm
Tumwater Harvest Festival – FREE!
Tumwater Falls Park
To volunteer for Stream Team booth,
Call Debbie @ (360) 754-4148

October 13 • 10am-Noon
Percival Willow Planting
Percival Creek @ Sapp Rd.
Call Debbie for info. @ (360) 754-4148

October 24 • 6pm-9pm
Chum Salmon Talk
Guest Speaker, Steve Shroder,
Research Scientist with WDFW
Thurston County Courthouse
Bldg 1, RM 152
For info, call Patricia @ (360) 570-5841

November 17 • 9:30am-11:30am
McLane Creek Chum
Salmon Stewards Training
McLane Creek Nature Trail
(off of Delphi Rd) Registration Required.
To register, call Ann Marie
@ (360) 357-2491

November 17 • 10am-Noon
Deschutes Revegetation Project
Tumwater Valley Municipal Golf Course
Meet at Clubhouse
For info., call Debbie @ (360) 754-4148

November

November 3 • 10am-1pm
Woodard Creek Tree Planting
For directions to the planting site call
Chris or Ann Marie at (360) 357-2491

November 15 • 6:30pm-9:30pm
Naturescaping for Water & Wildlife
See page 6. Registration Required.
To register, contact Erica at
(360) 754-3588 ext 110 or
ericag@wsu.edu

November
Chum Salmon Viewing with
Salmon Stewards *
Saturdays and Sundays, 10am-2pm
Thursday, November 22, 10am-2pm
Friday, November 23, 10am-2pm
Footbridge at McLane Creek
Nature Trail, off Delphi Rd.

December
Chum Salmon Viewing with
Salmon Stewards *
Saturdays and Sundays, 10am – 2pm
(through Dec. 16)
Footbridge at McLane Creek Nature Trail,
off Delphi Rd.

**Weather permitting*

Other Local Events

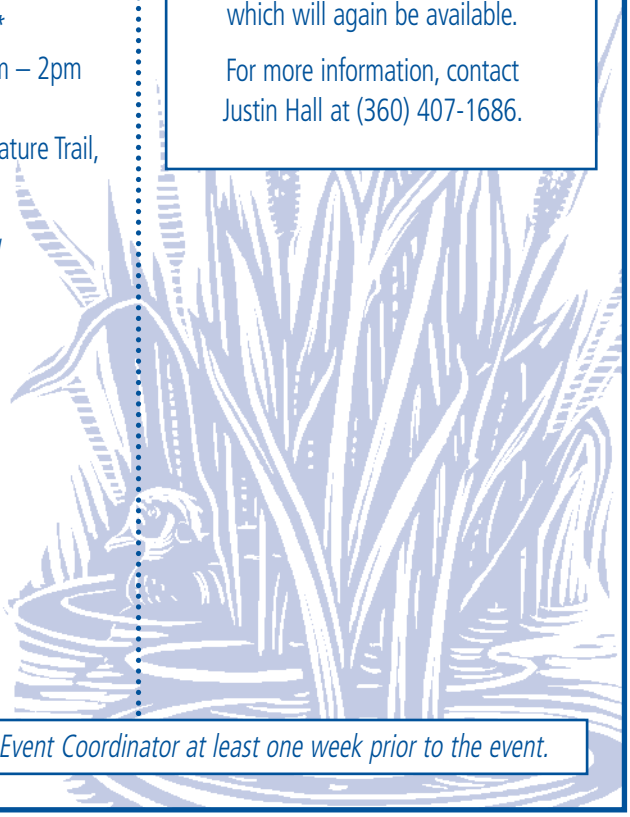
September 29 • 10am-4pm
***FREE!* 18th Annual**
Nisqually Watershed Festival

Nisqually National Wildlife Refuge
This year's festival includes numerous exciting entertainment, activities and exhibits for kids of all ages.

The main stage will feature reptiles, birds, and music and dancing. Fin, the Wild Olympic Salmon, and the Red Salmon Story Tent will be back along with the City Of Olympia's Storm Drain Dare Trailer.

Enjoy activities and exhibits from conservation-minded agencies and organizations including fish printing, plywood fish painting, a touch tank and more. The event is free except for the famous Nisqually Salmon Bake which will again be available.

For more information, contact
Justin Hall at (360) 407-1686.



PLEASE NOTE: *Should you require special accommodations, please call the Event Coordinator at least one week prior to the event.*

Left: *Stream Team volunteers collect macroinvertebrate (stream bug) samples in the field.* ***Right:*** *Volunteers package macro samples which are sent to a lab to be analyzed and rated.*

10-Year Anniversary of Macro Monitoring!

This summer marks the 10th year that Stream Team volunteers have helped gather benthic macroinvertebrate (stream bug) samples in Thurston County. This year, 22 volunteers had a chance to get their feet – and hands – wet collecting samples from 14 creeks and streams.

Stream bug monitoring appeals to a wide range of volunteers including families, students, retirees, fly fishers, environmental professionals and individuals who want to learn more or simply get out and do something worthwhile.

Gathering and preparing the samples from a stream can take three to six hours or more! But for some volunteers, time seems to "fly" while sampling and sorting organic matter (like stream bugs and leaf debris) from inorganic matter (such as rocks and sand). Sorting provides an opportunity to observe the "bugs" and learn more about where they live, and how they hide and move about. Depending on the macroinvertebrates found in the samples, some volunteers asked questions about the stream health or hypothesized about what might be impacting the stream. Others took time to look up macros in field guides to find out what they were and whether they may be sensitive or tolerant to pollution.

Now it is time to send the samples to a lab where they will be analyzed and given a rating score called the Benthic Index of Biological Integrity (BIBI). The resulting data provides valuable information about stream health to the Thurston County Environmental Health Department and to the volunteers who participate.

If you are curious about macro monitoring, plan on getting involved next year. Watch for information in the Spring 2008 Newsletter.

A big thanks is extended to all the volunteers who donated their time and enthusiasm to collecting and preparing the samples. Special thanks to those who helped make sure we had enough volunteers for each site. You all helped make the 10th Macro Monitoring Season a success: Barry & Loretta Brown, Mikel Debuse-Losh, Josie Losh, Roberta Woods, Joan Pierce, Don Eveleth, Jacob Sunday, Dennis Matsuda, Heather Brown, John Heimburg, Nicky Johnson, Steve Parks, Caren & Tatyana Gibbs, Jack Havens, Stephanie & Anja Bishop, Caty Whiteford, Taylor Pittman, Phyllis Craig & Mitch Craig, Dorothy Lyons, Satori Stratton, Greg & Katie Williams, Heather Johnson, Michelle Andrews, Mary Ann McNamara, Laura Mondau, Janet Buchholz, Ryan, Doug & Rich Doenges, Heidi Kirk and Laurie Niewolny.

Stream Team Volunteers:
Track your hours with a Kudo Kard!

As your hours add up, you become eligible for great Stream Team items like t-shirts, hats and mugs! Pick up a Kudo Kard the next time you volunteer for a project.

It's our way of saying thanks for all you do!

Featured Stream: McLane Creek

McLane Creek is one of Thurston County's natural treasures. The 14.5 mile long creek flows through fairly level terrain, including forested areas and pastures. Its highest elevation is 807 feet in the Black Hills and its lowest is sea level in Mud Bay. Tributaries in the 7,360 acre watershed flow from wetlands in the Black Hills of Capitol Forest to the mainstem of the creek, which flows northward into Eld Inlet in the Mud Bay estuary.

Historically, the McLane Creek watershed was forested. Early pioneers cleared the lower valley for agricultural use and logging took place throughout the watershed, especially in Capitol Forest (a state-owned forest managed by DNR.) The forest around the nature trail was logged in the early 1900's. It is now preserved by the Washington State Department of Natural Resources (DNR) for a public nature trail.

Today, several large farms remain, and logging still occurs along the western edge of the watershed in Capitol Forest. Most of the watershed is zoned rural/residential at a density of one unit per five acres. Several residential developments have been built in the southern end of the watershed off of Delphi Road.

The riparian corridor (area of vegetation adjacent to the creek) is relatively healthy with good canopy cover. A good portion of this can be seen while walking along the McLane Creek Nature Trail. A large beaver pond can also be seen while walking along the trail. The beaver pond provides excellent rearing habitat for juvenile coho salmon.

In addition to coho, McLane Creek also supports wild spawning chum salmon, steelhead and sea-run cutthroat trout. The nature trail is an excellent place to view spawning chum salmon from late October through mid-December.

While there have been some impacts to salmon from agricultural activities, logging and housing developments, fish populations have remained stable. The chum run has seen record numbers in recent years. In 2006, the Washington State Dept. of Fish and Wildlife estimated that over 10,000 chum salmon returned to spawn in McLane Creek.

In addition to fish, McLane Creek provides habitat for a variety of birds, amphibians and mammals including pileated woodpecker, pied-billed grebe, river otter and roughskin newt.

McLane Creek Nature Trail offers much to see year-round. This fall, Stream Team Salmon Stewards will be on hand to talk to trail walkers about the chum salmon spawning in the creek on Saturdays and Sundays between 10am and 2pm from early November through mid-December.

If you live in the McLane Creek watershed and would like to learn more about what you can do to protect and enhance this precious resource go to: www.co.thurston.wa.us/wwm/stream/trees.html or call Thurston County Stream Team at (360) 357-2491.

Directions to McLane Creek Nature Trail

From Northbound Highway 101: Take the 2nd Ave. exit and turn left onto Delphi Rd. Veer left and drive south on Delphi for about 3 miles. Turn right at the DNR McLane Creek Nature Trail sign.

From Southbound Highway 101: Take the 2nd Ave./Evergreen State College Exit and turn right onto Delphi Rd. Drive south on Delphi for about 3 miles. Turn right at the DNR Mclane Creek Nature Trail sign.

Fall Plantings Benefit from Ideal Conditions

Fall is the best time of year for planting trees and shrubs in your garden. Fall plantings require less water and grow more vigorously than spring plantings. It can take several months for a plant's roots to grow beyond the original planting hole to absorb ample moisture and nutrients from the surrounding soil. Fall transplants benefit from having more time to recover from transplant shock, adapt to the site and spread their root systems before the spring growing season.

Fall is also the time when deciduous plants enter dormancy, which means they transpire (lose) less water from their leaves. At the same time, fall and winter rains provide ample moisture for the roots, which help them recover from transplant shock.

Plant now and take advantage of fall's ideal weather conditions. Then sit back and watch them blossom next spring.

For information about gardening with native and drought-resistant plants come to the Stream Team sponsored Naturescaping for Water & Wildlife workshop (see pg 6) or visit the Native Plant Salvage Project website at www.thurston.wsu.edu/NPS. For information on natural yard care and gardening tips go to: www.co.thurston.wa.us/health/ehcsg/.

Left: *Prized by fishermen and women, steelhead are dependent on intact, healthy freshwater habitat to a greater degree than some species of salmon are.* ***Right:*** *A South Sound angler handles a majestic steelhead with great care, ensuring its safe release back into the wild.*

Puget Sound Steelhead Listed as 'Threatened'

Stream Team Salmon Stewards help educate the public about two local salmon runs: Deschutes-Percival Chinook and McLane Creek chum. Both of these runs are highly visible, especially the hatchery derived Deschutes Chinook as they mass at the 5th Avenue Bridge, then enter the Tumwater Falls Park fish ladder and harvesting facility. Both of these runs feature relatively healthy and robust populations. Yet, also present in our South Sound rivers and streams is a much more secretive and vulnerable species of salmonid – the steelhead.

Recently, the National Marine Fisheries Service announced that Puget Sound steelhead is a threatened species. Long in decline, steelhead *(Oncorhynchus mykiss)* are a species with a complex life history and thus are in many ways harder to manage than other species of salmon.

Prized by fishermen, steelhead and rainbow trout are the same species of fish. In fact, steelhead and rainbow trout were recently re-categorized as members of the salmon genus. What differentiates steelhead from rainbow trout is that steelhead are anadromous fish, spending part of their lives in the marine waters of Puget Sound and/or Alaska and British Columbia. In contrast, rainbow trout remain in fresh water, spending their entire life in streams and rivers.

These two fish are so genetically similar that if certain environmental conditions are present, anadromous steelhead can convert to fresh water residents while rainbow trout populations can become sea-going. Why does this phenomenon occur? It is speculated that if food availability is limited in fresh water, rainbow trout will migrate to the ocean. Conversely, if food is abundant in the river and its tributary streams, steelhead may choose to simply stay put.

This intertwined life history is in many ways much more complex than other species of salmon. For example, coho salmon usually spend two years in marine waters before returning to fresh waters to spawn while chum typically spend three years, though up to five years is possible. In contrast steelhead spend anywhere from one to three years at sea, with little predictability, before returning to spawn. And unlike the other five species of Pacific salmon, they don't necessarily die after spawning. While many steelhead are spent after their arduous journey back into the upper reaches of their natal river to spawn, a small percentage can and do return to the sea to fatten up, return and spawn again.

Will you see wild steelhead at the 5th Ave. Bridge, Tumwater Falls or McLane Creek? It is possible, but not likely. Wild steelhead are in steep decline in Puget Sound. Rivers such as the Nisqually, which once supported robust runs, are now seeing drastically smaller returns. In addition, the steelhead's complex and variable life history tends to make them more elusive and secretive. It is important to know that steelhead and resident rainbow trout are also part of a healthy South Puget Sound ecology, and the good news is that taking care of our local rivers and streams in a manner that benefits Chinook and other salmon species also benefits the majestic, threatened wild steelhead.

"Recently, the National Marine Fisheries Service announced that Puget Sound steelhead is a threatened species."

Stream Team Volunteer & Staff News

ºVolunteers Enhance Habitat along Percival Creek and Deschutes River

Percival Creek and the Deschutes River received some tender loving care this summer thanks to a group of dedicated Stream Team volunteers. Under the guidance of Tumwater's Water Resources Intern, Sara del Moral, volunteers worked throughout the summer to weed native shrubs and trees previously planted along the banks of our local streams.

Due to the dedication and hard work of Stream Team volunteers in the past few years, little scotch broom or tansy ragwort was found this summer on Tumwater's habitat enhancement sites along Percival Creek or the Deschutes River. Reed canary grass is starting to diminish thanks in large part to the willows and other native shrubs and trees planted by volunteers. The native plants are starting to shade the reed canary grass from the sunlight it needs to thrive.

The major weed volunteers battled this summer was the aggressively growing Himalayan blackberry. Although its berries are good eating, this non-native blackberry grows so fast that it can quickly overtake our native vegetation. Stream Team volunteers spent much of their time this summer wielding loppers to keep the Himalayan blackberry bushes at bay.

Stream Team volunteers who performed outstanding service at Percival Creek and Deschutes River habitat enhancement sites this summer included Caren and Tatyana Gibbs, Anne Mills, Steve Parks, Bernd Pielmeier, Diane Skov, Barbara Tomford and Gary Wilburn. Steve Parks took up the challenge of working beyond the Saturday work parties and continued the blackberry removal project during weekdays as well. Thanks to all of these hardy volunteers!

Stream Team volunteers weed native plants along the bank of the Deschutes River.

Welcome Regan Heineke

A native of Swanton, Ohio, Regan Heineke learned the importance of a healthy environment the best possible way – by playing in the 3,000 acres of Oak Openings Preserve. This childhood experience led her to a B.S. in Environmental Biology from the University of Dayton, Ohio, and to The Evergreen State College, where she is completing her Masters of Environmental Studies. Regan has spent the past year working in the State Senate, first as an environmental policy intern for Senator Dan Swecker (R-20th District) and as Bill Report Reviewer for Senate Committee Services during the 2007 Legislative Session.

Regan has experience in environmental education, public outreach, water quality testing, irrigation, environmental policy and she has also completed mediation and facilitation courses at the Thurston County Dispute Resolution Center.

Regan's interests include running, renovating her new home, evolutionary biology and environmental policy. She is excited about making Washington her home and helping the citizens of Lacey maintain and improve their water resources.

First Annual Bike Your Watershed Event a Success!

Ninety-six bicyclists participated in the first Bike Your Watershed event on Sunday, July 29. Bicyclists of all ages gathered at Tumwater Historical Park to sign-in, pick up their event t-shirt, color a paper salmon to decorate their bike, and ride their choice of a five, 20 or 30 mile route through the Deschutes Watershed.

Upon returning to the park, the bicyclists were treated to fruit, cookies and granola bars to replenish their energy. The Washington State Dept. of Ecology had watershed information available, including a map of Water Resource Inventory Area (WRIA) 13. The Deschutes Watershed makes up the majority of WRIA 13, but portions of Henderson, Eld and Totten watersheds are also included in WRIA 13. The map gave the bicyclists a chance to discover which watershed is their home.

Stream Team was there with watershed information and water education activities. Adults and children both enjoyed making the colorful paper salmon to attach to their bikes for the ride. Other water education activities were offered including the ever-popular salmon bead chain, which teaches the elements necessary for salmon survival.

Riders adorned their bikes with colorful paper salmon before cycling the Deschutes Watershed.

Look for information in next year's Stream Team News. To view photos from this year's event, visit the Bike Your Watershed website at http://web.mac.com/bikeyourwatershed/iWeb/Site/Welcome.html

Not Just for the Birds:
Naturescaping for Water & Wildlife
Thursday, Nov. 15 • 6:30pm-9:30pm
Thurston County Courthouse, Bldg 1, Rm 152

Find out how you can turn your yard into a beautiful landscape that attracts birds, butterflies, and amphibians while conserving and protecting water resources. Simple changes can also reduce the time you spend on maintenance chores such as watering and mowing!

This workshop will cover:

- Keys to attracting birds, butterflies, and amphibians
- Easy ways to minimize lawn space
- Solving drainage issues with onsite stormwater management
- Planting for four-season interest
- Landscaping ideas for tricky spots

This informative workshop will provide both novice and seasoned gardeners with wonderful ideas for enhancing their landscapes in environmentally friendly ways.

To register or for more information, contact Erica Guttman at (360) 754-3588 x110 or ericag@wsu.edu

STREAM TEAM MISSION: To protect and enhance the water resources, associated habitats and wildlife of Thurston County through citizen education and action.

Stream Team is funded by Storm and Surface Water Utility revenues.

STREAM TEAM INQUIRIES:

In Lacey: City of Lacey Water Resources Program
P.O. Box 3400, Lacey, WA 98509-3400
Attn: Tim Wilson – Tel: 360-438-2687 / TDD: 1-800-833-6388

In Olympia: City of Olympia Water Resources Program
P.O. Box 1967, Olympia, WA 98507
Attn: Patricia Pyle – Tel: (360) 570-5841 / TTY: 360-753-8270

In Tumwater: City of Tumwater Public Works
555 Israel Road SW, Tumwater, WA 98501
Attn: Debbie Smith – Tel: 360-754-4148 / TDD: 1-800-833-6388

In Thurston County: Thurston County Water & Waste Management
929 Lakeridge Dr. SW, Olympia, WA 98502
Attn: Chris Maun – Tel: 360-754-3355 EXT6377 / TDD: 360-754-2933

NEWSLETTER CONTRIBUTORS:
Tim Wilson, *Lacey Stream Team;* Patricia Pyle, *City of Olympia Water Resources;* Debbie Smith, *Tumwater Stream Team;* Chris Maun & Ann Marie Finan, *Thurston County Stream Team*

DESIGN & LAYOUT: Barbara McConkey, *Inform Design*

PLEASE NOTE: Citizens requiring special accommodations should call one of the coordinators listed above at least one week prior to an event.

STREAM TEAM

555 Israel Rd. SW • Tumwater, Wa 98501

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