

Stream Team News

FREE

OLYMPIA • LACEY • TUMWATER • THURSTON COUNTY

EDUCATE • PROTECT • RESTORE



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PURPLE MARTIN TALK & NEST BOX BUILDING ••••

- Saturday, January 9
- 10 a.m. – Noon
- Olympia City Hall
601 E 4th Ave.
Olympia



Purple Martin Talk & Nest Box Building

Join us for a fun, fact filled talk on purple martins, then stay and help build new nest boxes for the East Bay colony! No experience necessary!

Purple martins are the largest of the eight swallow species that breed in North America. Since the turn of the century martin populations have drastically declined due to the loss of nesting habitat. Purple martins' natural nesting habitat is in the cavities of tree snags. For several decades numerous citizen groups have been building and putting up nest boxes in an effort to provide alternate nesting habitat and reestablish purple martin colonies. These efforts have been widely successful! In downtown Olympia one success has been the nest boxes in East Bay off of Marine Drive. Now that the martins have migrated south we need to replace boxes that are disintegrating. Join Stream Team and guest speaker Michelle Tirhi, Washington State Fish and Wildlife, to learn more about purple martins and help nail together new nest boxes!

To register online, visit www.streamteam.info and click on "Register." For additional information, contact Michelle at mstevie@ci.olympia.wa.us

ON THE COVER: Allison Springs: Kayaking with chum salmon and eagles. Photo by Michele Burton Photographer.

STREAM TEAM MISSION

To protect and enhance the water resources and associated habitats and wildlife in Thurston County through citizen action and education.

Stream Team is funded and jointly managed by the stormwater utilities of the Cities of Lacey, Olympia and Tumwater and Thurston County. Stream Team programs meet the requirements for the National Pollutant Discharge Elimination System (NPDES) permit for stormwater.

SPECIAL NEEDS?

Citizens requiring special accommodations can call one of the coordinators listed at least one week prior to an event to make special arrangements.

FIND US ON FACEBOOK:

 [ThurstonStreamTeam](https://www.facebook.com/ThurstonStreamTeam)

STREAM TEAM INQUIRIES

360-438-2672 or streamteam@ci.lacey.wa.us

IN LACEY:

City of Lacey Water Resources Program
420 College St. SE, Lacey, WA 98503

Attn: Kim Benedict

Tel: 360-438-2687
TDD: 1-800-833-6388
kbenedic@ci.lacey.wa.us

IN OLYMPIA:

City of Olympia Water Resources Program
P.O. Box 1967, Olympia, WA 98507-1967

Attn: Michelle Stevie

Tel: 360-753-8336
mstevie@ci.olympia.wa.us

IN TUMWATER:

City of Tumwater Water Resources Program
555 Israel Road SW, Tumwater, WA 98501

Attn: Debbie Smith

Tel: 360-754-4148 TDD: 1-800-833-6388
dmsmith@ci.tumwater.wa.us

IN THURSTON COUNTY:

Thurston County Water Resources Program
929 Lakeridge Dr. SW, Olympia, WA 98502

Attn: Chris Maun or Ann Marie Pearce

Tel: 360-754-3355 EXT 6377
TDD: 360-754-2933
maunc@co.thurston.wa.us
pearcea@co.thurston.wa.us

NEWSLETTER CONTRIBUTORS: Kim Benedict, Chris Maun, Ann Marie Pearce, Michelle Stevie, Debbie Smith, Chelsey Cook, Emmery Ledin and Michele Burton Photographer.

DESIGN & LAYOUT: Azure Summers Graphic Design, design@azuresgd.com

Don't Let Your Pooch Pollute!

Winter is here, and so is the rain, which means it's doubly important to pick up after your pet. Stormwater runoff can pick up disease-causing organisms and bacteria from pet waste and carry it into storm drains and, ultimately, into local lakes, streams and Puget Sound! This leads to raw pet sewage flowing into the places we swim, boat, fish and harvest shellfish.

One day's worth of pet waste from one large dog can contain **7.8 billion** fecal coliform bacteria, which is enough harmful bacteria to close 15 acres of shellfish beds from being harvested. An estimated 55,000 dogs live in Thurston county.

Kids are especially susceptible to diseases caused by coming in contact with soil or water contaminated with pet waste. Whether walking your dog down the street, in the park or in the backyard, it's important to "Scoop it; Bag it; and Trash it" every time.

Your local Stream Team jurisdiction can help you "Scoop it; Bag it; and Trash it."



Get a FREE Personal-Sized Pet Waste Bag Dispenser!

You can pick up a handy-dandy pet waste bag dispenser to attach to your dog's leash, so you are always prepared to scoop, bag and trash your pet's waste. Stop by the customer service counters at the city hall building for Lacey, Olympia or Tumwater or the Water Resources office for Thurston County (929 Lakeridge Drive SW, Olympia) to pick up your free pet waste bag dispenser.



1 gram raw pet sewage
(about the weight of a green pea)
= 23 million
coliform bacteria

Get a Pet Waste Pick Up Station for Your Neighborhood!

Help spread the word (and pet waste bags) in your neighborhood. Lacey, Olympia, Tumwater and Thurston County offer free pet waste stations, which include a metal sign, durable plastic dispenser and a free set of pet waste bags, to qualifying homeowner's associations, neighborhoods, multifamily housing complexes and other approved community areas.

To find out about eligibility requirements and guidelines for the neighborhood pet waste pick up stations, contact the staff listed below in the jurisdiction in which you live and/or where the station will be located:

City of Lacey (city limits) Kim Benedict 360.438.2687

City of Olympia (city limits)..... Susan McCleary 360.570.3794

City of Tumwater (city limits) Debbie Smith 360.754.4148

Thurston County (unincorporated) Ann Marie Pearce 360.754.3355 x6857





Chelsey Cook

Chelsey Cook was born in the Pacific Northwest and grew up in the Ballard neighborhood of Seattle. She attended the Huxley College of the Environment at Western Washington University where she received a B.S. in Environmental Science. While attending Western, Chelsey enjoyed being an active part of the campus community; she served as the president of the Air and Waste Management Association. Recently, Chelsey interned with Snohomish County where she worked on environmental outreach and education. Chelsey looks forward to continuing that work and learning more with the City of Lacey and Stream Team. In her spare time Chelsey enjoys camping, hiking and hunting for chanterelle and morel mushrooms. She can't wait to work with Stream Team Volunteers and Coordinators over the next nine months!

AmeriCorps Volunteers Join Stream Team



CREDIT: NICK SORENSEN

Emmery Ledin

A desert native; Emmery was born and raised in a suburb west of Phoenix, Arizona. She has one 17 year old brother, two parents, and an awesome husband, Jerry. It is because of her husband's military career that she ended up in Washington (happily!). Emmery attended Arizona State University, and studied at their Global Institute of Sustainability. She loves learning, and truly enjoyed the time she spent attaining her Bachelor's degree in Sustainability. Most of her career has reflected her passion for the environment; the majority of her work has been in community outreach and water conservation initiatives. In her spare time, Emmery enjoys photography, painting, biking, and hanging out with her husband. She is looking forward to recruiting passionate volunteers, and learning more about the beautiful state of Washington!

MLK Day of Service Restoration Day: Olympia



- **Monday, January 18**
- **10 a.m. – 1:00 p.m.**
- **Mission Creek Watershed
Location TBD, Olympia**



At Mission Creek Watershed in Olympia:

Come plant native trees and shrubs, spread mulch, and remove ivy with Stream Team and Olympia Parks, Art and Recreation to restore the aquatic habitat in Mission Creek watershed. Please dress for the weather. Gloves, tools, and hot beverages will be provided.

To register for this workshop, visit www.streamteam.info and click on "Register". For more information, contact Michelle Stevie at mstevie@ci.olympia.wa.us

Who's singing ... (croaking)

in your neighborhood?

Ever wonder what all the noise is about, which frog is doing the singing and why? Join Stream Team and herpetologist Dr. Marc P. Hayes for a fun, informative workshop. Dr. Marc P. Hayes, a herpetological ecologist and senior research scientist with the Washington Department of Fish and Wildlife, has over 40 years of experience working with amphibians and reptiles in Arizona, California, Costa Rica, Florida, Mexico, Oregon and Washington.

This workshop will explore the ecology, habitat requirements and unique characteristics for each species. It will also cover species identification of PNW amphibians at different life stages with some emphasis on egg mass identification.

Do you like slogging around in wetlands?

Join Stream Teams adventurous volunteers and survey this winter for amphibian egg masses!

Surveys begin mid-February and occur through March.

Watch our website calendar for additional dates in March for more egg mass surveys.

To register for this workshop or to survey egg masses, visit www.streamteam.info and click on "Register". For additional information, contact Michelle at mstevie@ci.olympia.wa.us

AMPHIBIANS OF THE PACIFIC NORTHWEST

LIFE HISTORY TALK:

- Saturday, January 23
- 9:30 – 11 a.m.
- LOTT WET Science Center
500 Adams St NE
Olympia

EGG MASS FIELD TRAINING:

- Saturday, January 23
- 11:30 – 2 p.m.
- Hansen Elementary
1919 Road Sixty-Five
Olympia



EGG MASS SURVEY DATES:

- Saturday, February 20
- Saturday, February 27
- 9 a.m. – Noon



MLK Day of Service Restoration Day: Lacey

At Woodland Creek Community Park in Lacey:

Come plant native trees and shrubs, spread mulch, and remove invasive blackberry with Stream Team to restore the aquatic habitat in Woodland Creek watershed. Please dress for the weather. Gloves, tools, and hot beverages will be provided.

To register for this workshop, visit www.streamteam.info and click on "Register". For more information, contact Stream Team at streamteam@ci.lacey.wa.us or 438-2672.

- Monday, January 18
- 10 a.m. – 1:00 p.m.
- Woodland Creek Community Park
6729 Pacific Ave SE, Lacey



Featured Creature

Anna's Hummingbird (*Calypte anna*)



..... *Puget Sound's Year Round Resident:*

Anna's Hummingbird (*Calypte anna*)

Anna's hummingbirds are a common western resident and may be found in Puget Sound year round. Anna's hummingbird is a medium sized (4 inches or 10 cm) hummingbird with a straight bill and sloping forehead. It's brilliant iridescent colors make it most distinguishable from others. Both males and females are bronze-green above, and gray below. The males' entire head and throat are bright sparkling rose pink-red and their bodies an iridescent emerald green. The females have green heads, with a small amount of red on their throats. Females also have black tails with white tips, while the males' tails are solid blackish-gray.

Range	Abundant in coastal lowlands and Puget trough. Found from British Columbia to Baja California. The first recorded breeding pair in Washington was in Tacoma in 1976. It is now found breeding throughout the lowlands of Puget Sound.
Habitat	Found in a variety of habitats including coastal scrub, oak savannahs and open woods, common in urban environments. Its traditional habitat was chaparral but it is now more frequently found in suburban gardens where exotic flowering plants and hummingbird feeders provide it with a year-long food source. Anna's Hummingbirds eat nectar from many flowering plants, including currant, gooseberry, manzanita, and many introduced species such as eucalyptus as well as hummingbird feeders. It also eats a variety of small insects and spiders including the insects that feed on the sap found in sapsucker holes.
Behavior	One of the most distinctive behaviors of the Anna's Hummingbird is the male's courtship flight dive. The male flies up to 130 feet in the air and then swoops to the ground. At the bottom of the dive he makes a loud noise thought to be produced through his tail feathers. Both males and females defend feeding territories, although males defend them more diligently and for a longer period of time. Males and females do not form pairs, they mate with more than one individual per season.
Nesting	Females build the nest out of plant down from cattail, willow, thistle, feathers and spider webs. They form the interior of the nest with lichen. A female will sit in the nest cup and build the nest up around her. Nests are tiny, 1 inch by 1.5 inches in diameter and they take approximately 1 week to build. A female incubates two eggs for 14-19 days and feeds the nestlings on her own until they become independent at 18-23 days. A female may have 2-3 broods a year.
Conservation	Currently Anna's hummingbird is the most common hummingbird on the west coast. Historically it was limited to western California and Baja California. Due to the widespread use of backyard feeders and the introduction of eucalyptus trees in California, as well as exotic garden flowers that provide it year round food sources, Anna's hummingbird has expanded its range northward as far as British Columbia. It is currently very common across much of its range, and because it adapts well to suburban areas it is expected to continue to thrive in the future.



Help Protect Our Waterways:

Report Illegal Dumping

Since most storm drains flow to local waterbodies, dumping any substance into the stormwater system can be a threat to environmental and human health. It is illegal to allow anything other than rainfall and snowmelt (stormwater) into a storm drain. All local city and county governments have laws, some even have monetary penalties, to try to discourage anyone from dumping any substance down a storm drain.

Stream Team volunteers have marked many local storm drains with a colorful sticker which states: No Dumping; Flows to Waterways. Thanks to these volunteers, many people have become aware that storm drains flow directly to our waterways and must be kept clear of contaminants.

Last summer, a Tumwater Hill resident reported the dumping of wood stain into a public storm drain. Due to their quick action, Tumwater Public Works Operations staff were able to respond, contain and clean up the spill. Unfortunately, the person responsible for the spill was not able to be identified and fined.

If you observe illegal dumping into a storm drain or water body, please call the appropriate Spill Hotline number immediately. Quick notification will allow crews to be sent out to contain the spill before there is widespread harm.



WOOD STAIN ILLEGALLY DUMPED INTO A DRAIN ON TUMWATER HILL.



24 Hour Spill Hotlines:

Call 24 hours/7 days a week

LACEY 360-491-5644

OLYMPIA 360-753-8333

TUMWATER 360-754-4150

THURSTON COUNTY 360-867-2099

"WINTER TWIG IDENTIFICATION" FIELD CLASS

- Sunday, January 24
- 10 a.m. – 12:30 p.m.
OR 1 – 3:30 p.m.
- West Olympia-area nature trail
- Cost: \$5



Discover Winter's *Hidden Gems*

Add a new dimension to your winter outings when you join local plant experts to discover the subtle beauty and learn the secrets to identifying 25 local shrubs and trees without their leaves. "Winter Twig Identification" is a 2.5-hour field class held at a West Olympia-area nature trail on Sunday, January 24. Choose from one of two sessions: 10 a.m. to 12:30 p.m. or 1 to 3:30 p.m.

The class costs \$5, and participants will receive a handout and have the opportunity to purchase the *Winter in the Woods* book. Advanced registration is required by contacting the Native Plant Salvage Foundation at 360-867-2167 or by email at nativeplantsalvage@gmail.com. Workshop details and directions will be sent to all participants in advance.



STREAM TEAM 2015





A YEAR IN PHOTOS



Featured Waterbody

Mud Bay



Mud Bay

Mud Bay has the distinction of being the southernmost reach of Puget Sound.

An extension of Eld Inlet, Mud Bay is easily viewed where the bridge on U.S. Highway 101 crosses the bay about three miles west of Olympia's west side. Mud Bay is highly distinctive and aptly named for its substrate of silt and mud. With its low gradient and sharply rising shores, low tides expose expanses of marine mudflats. During low tide, small channels are revealed that incise the glistening mud. These channels are invaluable habitat for marine benthic organisms. Mud Bay is ringed by some of the last remaining coastal saltmarsh in lower Puget Sound. Saltmarsh plants, such as *Salicornia* or pickleweed, are salt tolerant and frequently flooded by tidal waters. Pickleweed and other salt marsh plants are used by native peoples as a food resource. Fifteen foot tidal swings fill up the entire basin twice daily, hiding Mud Bay's signature substrate until the next tidal ebb.

While Mud Bay itself has a small drainage area of only 3.7 square miles, it is fed by McLane Creek which flows out of the Black Hills. McLane Creek and its tributaries, including Swift Creek, support a large run of wild chum salmon during late fall months. Shortly after the chum salmon hatch out of McLane Creek's gravel, the smolts move quickly downstream to the estuary of upper Mud Bay. Here, they feed and grow while adjusting to the marine saltwater environment, before heading out to open ocean environments.

Mud Bay also supports a wide variety of other fish and wildlife species including fall Chinook, coho, winter steelhead, native anadromous cutthroat trout and forage fish such as sand lance and surf smelt. Osprey and great blue heron are frequently observed in Mud Bay, though most noticeable are the bald eagles which return in winter to feast on the spawned out carcasses of chum at the mouth of McLane Creek where it enters Mud Bay. Each December, dozens of eagles roost in the fir trees on the shore of Mud Bay taking advantage of the hundreds of dead salmon that add essential nutrients to the stream and bay.

Mud Bay Holds Significant Historical Distinctions

Before the arrival of the first Europeans and Euro-Americans, the people of the Squaxin Island Tribe fished and gathered shellfish and other marine resources in the South Sound area. This area continues to be an important resource for the tribe. In the past 20 years a significant archeological site was found in Mud Bay. After its finding, the wet site, called Qwu?gwes, was excavated jointly by the Squaxin Island Tribe and the local community college. Tools, an entire preserved fish trap, basketry, shell middens, and trade beads among a myriad of artifacts were recovered at the site. In the fall of 1999, carbon -14 testing of a native fish net indicated that the site was approximately 500 years old. The Squaxin Island Tribal Museum, located off the old Highway 101 in Kamilchee, WA near Shelton, WA provides an opportunity to see the artifacts that were unearthed at the Qwu?gwes archeology site on Mud Bay (www.squaxinmuseum.org).

Early European Exploration of Mud Bay

In May of 1792, Captain George Vancouver dispatched Lieutenant Peter Puget in a small, shallow draft rowing vessel to explore and map the shoreline and inlets of what is now known as Puget Sound. Puget's party ventured all through Mud Bay and documented friendly contact and trade with the local Squaxin people. Puget called the inlet "Friendly Bay" in his journal due to the pleasantries exchanged with the indigenous people, but the name didn't stick.

In 1824, an expedition of Hudson's Bay Company from Astoria ventured up through what is now Southwest Washington and arrived on the shores of Mud Bay on December 6th. The expedition was on its way to the eventual Fort Nisqually. A member of this party was William Cannon. Cannon was a blacksmith for Hudson's Bay Company and a veteran of the American Revolution, who had made his way across America.

While surveying shorelines in 1841, Charles Wilkes, commander of the U.S. exploration expedition now known as the Wilkes Expedition, named the body of water that includes Mud Bay, Eld Inlet after midshipmen Henry Eld. Local use has retained the name of Mud Bay for the upper part of the inlet.



Early in the 20th century, Mud Bay saw an explosion of logging activities. Multiple logging operations were sited at Mud Bay as the nearby Black Hills provided billions of board feet of wood. Logs were hauled to Mud Bay where they were floated as log rafts up Puget Sound to Weyerhaeuser's saw mill in Everett. The logs were processed into lumber. By 1941, the last of these logging operations "The Mud Bay Logging Company" closed as the Black Hills ceased to be economically productive.

Current Land Use

Today, a significant amount of the shoreline in Mud Bay is less developed than other shorelines in south Sound. The local Olympia land trust, Capitol Land Trust, maintains a Lower Eld Preserve on Mud Bay that includes 1.25 miles of shoreline on Mud Bay. The preserve protects valuable shoreline that supports disappearing saltmarsh and emergent wetland vegetation. This important parcel also contains over 40

acres of wetlands, 14.5 acres of forest, and a portion of McLane Creek with its healthy salmon populations.

Accessing Mud Bay

Mud Bay can be accessed via the William Cannon Trail located at the WSDOT Park and Ride Lot on Mud Bay Road. This short $\frac{3}{4}$ of a mile walking trail skirts the perimeter of a light industrial storage yard, and ends

on the shoreline of Mud Bay. The trail begins at the back of the parking lot near historical interpretive signs. From the trail, you can also see the remnants of piers used by the logging companies a century ago. Nearby on Mud Bay Road, right next to a local tavern, is a historical wayside sign commemorating Lieutenant Peter Puget's visit to Eld Inlet and Mud Bay in 1792 as part of the Voyage of Discovery.



Featured Bare Root Plant

Mock Orange



Mock Orange

Description	Loosely branched shrub, grows up to 10 feet.
Flowers	Large fragrant white flowers, grow in clusters of 3 – 15, flowers May – July
Benefits	Excellent soil and streambank stabilizer attracts bees and other pollinators.
Habitat	Grows in well-drained to dry soils. Full sun to partial shade.

Winter is a Wonderful Time to Plant Bare Root Trees & Shrubs

A bare root plant is a plant that is sold with its roots exposed, rather than potted in soil. Due to the short days and cooler temperatures, trees and shrubs sold as bare root are in their dormancy; which means their respiration rate and nutritional needs are at a minimum. Therefore, nurseries can offer “bare root” trees, bushes and vines, one to two year-old plants with their roots packed in newspaper, sawdust or burlap, at a lower cost than traditionally potted plants. Planting with bare root plants can save you money and it can give the plant extra time to establish its roots before summer.

Bare root plants should be planted right away. In our warmer Pacific Northwest winter climate, it is best to plant a day or two after it has rained, when the soil has been loosened by the moisture, but is no longer soggy wet. Store a dormant tree out of direct sunlight and don't let the roots dry out entirely.

If they cannot be planted right away, then they can be “heeled” in for a short while until you can plant them.

Here's a link for “Steps For Heeling in Plants” from Gardening Know How:
tinyurl.com/heelinginplants

You can find a wide selection of bare root plants at local nurseries or you can order bundles of bare root native trees, shrubs and ground cover plants from the Thurston Conservation District's (TCD) annual bare root plant sale. TCD is taking pre-orders now through January 15th. You can view a list of available plants and place orders online at <http://www.thurstoncd.com/store/>.

TCD's website provides information about each species of plant to help you select the best plant for your yard. Learn how to “Plant it Right” by following TCD's guide to planting trees, shrubs and live cuttings: tinyurl.com/plantright

WSU Native Plant Salvage often hosts workshops to help residents learn how to design and install water-wise landscapes that benefit wildlife and water resources. For information about upcoming workshops, visit www.nativeplantsalvage.org.

Winter Lawn & Garden Checklist

With wetter weather and cooler temperatures, winter is the perfect time to tackle some simple maintenance and planning activities for your lawns and gardens!

Lawns

- **Tune up time!** Service lawn mowers and sharpen blades.
- **Rake leaves!** Leaves can be composted or spread over garden beds. Small leaves can be mowed and left on the lawn as mulch.

Trees and Shrubs

- **Prune!** Prune fruit and other trees and shrubs in late January thru February, while they are dormant. Make sure to research proper pruning techniques, such as described by WSU Extension: <http://ext100.wsu.edu/maritimefruit/pruning-tree-fruit-the-basics/>, or hire a certified arborist to make sure they're pruned correctly.
- **Plant!** "Bare root" trees and shrubs are less expensive, easy to plant, and, when planted in winter, they have more time to establish their roots before summer!
- **Weed, again! Weed, again!** A late winter clean up can remove annual weeds before they go to seed and save a lot of work later!
- **Clean up, again!** In late winter, cut back perennials to make room for new growth.
- **Mulch!** If you did not spread mulch in the fall, mulch now to reduce top soil erosion and to protect plants during cold winter weather. When your plants awaken in the spring your beds will have fewer weeds, leaving you with more time to enjoy the season!

Dull blades pull and tear grass, which weakens it and makes it more susceptible to fungus and grass diseases. A sharp mower blade provides a clean cut and allows grass to heal more quickly.

ORDER BARE ROOT PLANTS FROM THURSTON CONSERVATION DISTRICT

Pre-orders for the 2016 Annual Native Plant Sale is going on now through January 15!

Pre-order online at
<http://www.thurstoncd.com/store/>
Orders will be available for pick-up March 3-5 at the Thurston Conservation District office.

Downspouts and Gutters

- **Clean gutters and drainage downspouts!** Clean twice a year. Inspect for leaks or damage.
- **Do you know where your downspouts discharge?** If they lead to a drywell or other stormwater system feature (like many new homes) you are good to go. If not, direct runoff away from your foundation onto lawns or landscaped areas. Make sure flow is not directed off of your property, towards your neighbor's property, or towards a roadway. Stormwater must be infiltrated where it falls.
- **Add a splash block, rock or perforated pipe** to slow the flow and spread roof runoff into lawns, landscaped areas, rain gardens or rock-filled infiltration trenches.

Storage Areas

- **Check for and dispose of unwanted pesticides safely!** Take unwanted pesticides and other household hazardous waste materials to HazoHouse located at the Thurston County Waste and Recovery Center, 2420 Hogum Bay Road NE, Lacey.
- **Safely store lawncare and other hazardous products!** Store products upright in original containers. Keep away from children and pets. Clean up spills immediately.

For more information on how to safely dispose of household hazardous waste go to: <http://www.co.thurston.wa.us/solidwaste/hazardous/haz-home.htm> or call the Thurston County Solid Waste Hotline at 360-867-2491.

Mulch grows healthier plants & makes garden maintenance easier!

- ✓ Reduces water use by up to 50%.
- ✓ Smothers weed seedlings and makes them easier to pull.
- ✓ Prevents soil erosion.
- ✓ Keeps soil loose and absorbent, which reduces runoff.
- ✓ Feeds plants and beneficial soil life that keeps plants healthy.

REPORTING SPILLS

An illicit discharge is defined as anything other than stormwater going into the stormwater system.

Examples are carpet cleaning waste water, paint, oil, pet waste, sewage, foam, grease and garbage.

To report a small-scale spill or illicit discharge, call your jurisdiction's 24-hour hotline. You can do so anonymously.

Olympia: **360-753-8333** Lacey: **360-491-5644** Tumwater: **360-754-4150** Thurston County: **360-867-2099**

To report a large-scale spill or illicit discharge, call the WA Dept. of Ecology Spill Hotline: 360-407-6300.

Call 911 if there is an immediate threat to life.

Kids' CORNER

CAN YOU FIND
THESE STREAM TEAM
RELATED WINTER
WORDS?

EGG
FORAGE
HABITAT
WATER
TREE
WORKSHOP
FISH
PET
QUALITY
AMPHIBIAN
WINTER
BACKYARD
WASTE
STREAM

WINTER WORD SEARCH

R	A	D	W	A	S	T	E	U	H
D	N	R	E	T	A	W	E	Y	T
K	Y	A	D	I	L	O	H	P	T
Y	T	Y	I	A	P	R	H	S	A
U	I	K	I	B	W	K	A	T	T
A	L	C	H	O	I	S	C	R	I
D	A	A	G	T	N	H	A	E	B
T	U	B	W	G	T	O	P	A	A
I	Q	T	R	E	E	P	R	M	H
H	S	I	F	O	R	A	G	E	A

ILLUSTRATIONS COURTESY ANNE SCHUSTER



Stream Team *Events*

For additional events, event details, or to register, please visit our website and click on "Calendar" or "Register": www.streamteam.info

For maps and directions to any of these events, go to: streamteam.info/getinvolved/directions/

DECEMBER

Forage Fish Surveys

Mon., Dec. 7 • 9 a.m.

Priest Point Park

Survey various local beaches for surf smelt and sand lance eggs. Lab analysis of samples to follow. No training necessary! (Surveys are tide dependent so survey times may be variable.)

For more info., contact Michelle @ mstevie@ci.lacey.wa.us Register online.

JANUARY

Forage Fish Surveys

Thurs., Jan. 7 • 9 a.m.

West Bay Park

For more info., contact Michelle @ mstevie@ci.lacey.wa.us Register online.

Purple Martin Talk & Nest Box Building

Sat., Jan. 9 • 10 a.m. – Noon

Olympia City Hall, 601 E. 4th Ave.

Join us for a fun, fact filled talk on purple martins, then stay and help build new nest boxes for the East Bay colony! See pg. 2 for details. Register online.

Help Stream Team Plant Holiday Trees!

Sat., Jan. 9 • 10 a.m. – 1 p.m.

Woodland Creek Community Park

See pg. 16 for details. Register online.

MLK Day of Service Restoration Day

Mon., Jan. 18 • 10 a.m. – 1 p.m.

Please dress for the weather. Gloves, tools, and hot beverages will be provided. Register online.

Mission Creek Watershed Location TBD, Olympia

Come plant native trees and shrubs, spread mulch, and remove ivy with Stream Team and Olympia Parks, Art and Recreation to restore the aquatic habitat in Mission Creek watershed. Please dress for the weather. Gloves, tools, and hot beverages will be provided.

For more info., contact Michelle @ mstevie@ci.lacey.wa.us

Woodland Creek Community Park, 6729 Pacific Ave SE

Come plant native trees and shrubs, spread mulch, and remove invasive blackberry with Stream Team to restore the aquatic habitat in Woodland Creek watershed.

For more info., contact Stream Team at streamteam@ci.lacey.wa.us or 360-438-2672.

To Register a Group

go to: <http://streamteam.info/getinvolved/calendar/register-steps.php>

JANUARY

Amphibians of the Pacific Northwest: Life History Talk

Sat., Jan. 23 • 9:30 – 11 a.m.

LOTT WET Science Center, 500 Adams St NE, Olympia

See page 5 for details. Register online.

Amphibians of the Pacific Northwest: Egg Mass Monitoring Field Training

Sat., Jan. 23 • 11:30 a.m. – 2 p.m.

Hansen Elementary 1919 Road Sixty-Five, Olympia

See page 5 for details. Register online.

FEBRUARY

Forage Fish Surveys

Sat., Feb. 6 • 9 a.m.

The Evergreen State College

Carpooling available. For more info., contact Michelle @ mstevie@ci.lacey.wa.us Register online.

Amphibians Egg Mass Monitoring

Sat., Feb. 20 • 9 a.m. – Noon

Sat., Feb. 27 • 9 a.m. – Noon

Meeting Location TBA

See page 5 for details. Register online.

COMMUNITY EVENT

Winter Twig ID Field Class

Sun., Jan. 24

10 a.m. – 12:30 p.m. OR 1 – 3:30 p.m.

\$5. See page 7 for details.

Register online at www.nativeplantsalvage.org



Check online at www.streamteam.info/getinvolved/calendar/ for up-to-date events, including additional tree planting events.

HOW TO REGISTER FOR EVENTS



Visit: www.streamteam.info and click on "Register"



Select the event for which you plan to register



Click on the register button near the bottom of the "Event Detail"



Follow the instructions to either log in as an existing volunteer or create a new secure profile

EARN YOUR FREE "P.S. I LOVE YOU" BAG

by participating in four types of Stream Team events:

Macro, Amphibian, or Forage Fish Monitoring; Salmon or Sound Stewarding; Tree Planting or Maintenance; Educational Workshop

Look for the "P.S. I Love You" stamp next to the events in our calendar for qualifying events.



Stream Team

EDUCATE • PROTECT • RESTORE
Olympia • Lacey • Tumwater • Thurston County

2000 Lakeridge Dr SW
Bldg 4 #100
Olympia, WA 98502
www.streamteam.info

Holiday Trees for Restoration

This holiday season, you can enjoy the beauty and fragrance of a live potted tree in your home! After the holiday, return the tree to Stream Team to be planted at a restoration project.

How does it work? 1

Purchase a live potted tree from Puget Sound Plants for the holiday season (discounted price). Tree orders will be taken beginning Dec. 7 and must be picked up by Tuesday Dec. 22nd. After the holidays, drop the tree off at a designated location by Jan. 4, 2016.

Trees will be kept in a nursery and cared for until they are planted by Stream Team volunteers later this winter or in the spring. Replanting trees next to streams provides shade that keeps streams cool for salmon and other species of fish and wildlife. You can also help plant the trees on Saturday, Jan. 9 at Woodland Creek Community Park.

Want to participate?

Place your tree order by calling Puget Sound Plants at 866-816-5080, Monday–Friday, beginning Dec. 7, 8 a.m. – 4:00 p.m. Mention that your tree purchase is with the Stream Team Holiday Tree Program. Arrange the pickup day and time when placing your order. Puget Sound Plants is not open on weekends.

Cost: \$30 (includes pot) for a 4-5 foot Douglas fir

Note: Trees weigh between 60-115 pounds. Care instructions will be included.

Pick Up 2

Puget Sound Plants is located at 3147 46th Ave NE, near South Bay and Shincke Roads. Please pick up the tree at the prearranged time and day.

This limited offer ends soon.

Please place orders starting Dec. 7 and pick up your tree by Dec. 22.

Returning Your Tree 3

After the holidays, you can plant your tree (instructions included) or you can choose between two locations to drop off your tree. Trees must be moved outdoors as soon as possible and no later than Jan. 2.

- Lacey City Hall, 420 College St SE
Assisted drop off:
Jan. 4 • 4–6:30 p.m.
- City of Olympia Nursery,
830 Union Ave SE, alley access
behind Chevron
Assisted drop off:
Dec. 30 & Jan. 4 • 7–9 a.m.
- Woodland Creek Community Park,
6729 Pacific Ave SE
Assisted drop off:
Jan. 9 • 10 a.m.–Noon
Planting: Jan. 9 • 10 a.m.–1 p.m.

Save the Date!

Help Stream Team Plant Holiday Trees!

Sat., Jan. 9 • 10 a.m. – 1 p.m. • Woodland Creek Community Park

You are invited to help Stream Team plant trees donated through our Holiday Tree Program on Sat., Jan. 9 from 10:00 am – 1:00 p.m.! We will be at Woodland Creek Community Park planting the native, live trees that were returned after the holidays. You will be able to see first-hand the success of trees planted in previous years of the Holiday Tree Program as you work to plant new ones. These trees will improve ecosystem health for years to come, so start off the New Year by getting outside and helping our community!

To register online, visit www.streamteam.info and click on “Register”. For additional information, contact Kim at kbenedic@ci.lacey.wa.us.

**Tree planting
OPEN TO EVERYONE!**