Stream Team News

FREE

OLYMPIA • LACEY • TUMWATER • THURSTON COUNTY

EDUCATE • PROTECT • RESTORE

SUMMER EDITION
June–July–Aug 2018

Inside...

PURPLE MARTIN LOLLAPALOOZA!

- **Fri., July 20**
- **7 a.m. – 7 p.m.**
- **East Bay: Corner of Marine Drive and Olympic Ave, Olympia**

PHOTO BY MICHELE BURTON PHOTOGRAPHER

Fledging is the time a bird is first ready for flight.

2nd Annual Purple Martin Lollapalooza!

Last year was such a huge success that we decided to do it again! Thanks to all the volunteers who helped out! Purple martins are the largest swallow in North America. Each year they migrate from South America to nest over the waters of Puget Sound. Drop in and help monitor the nest boxes throughout the day for this intensive monitoring day. Every year we monitor the nest boxes, but these aerial acrobats are difficult to keep up with so we still have limited information about hatching and fledgling success! Join us for a fun, informative day of comradery and help us collect information on nesting success of the East Bay nest boxes. Experts will be on hand from 10 a.m. – 1 p.m. to answer questions and help identify fledglings.

ON THE COVER: Come see marine creatures like this Graceful rock crab (*Cancer gracilis*) at Marine Creature Mondays this summer! (pg. 5)

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

NEWSLETTER CONTRIBUTORS:

Kim Jones, Darcy Bird, Alicia De Jong, Susan McCleary, Ann Marie Pearce, Debbie Smith, Michelle Stevie and Michele Burton Photographer.

CITY OF LACEY · Olympia · CITY OF TUMWATER · THURSTON COUNTY WASHINGTON SINCE 1852

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
Tel: 360-491-5600
TDD: 1-800-833-6388
streamteam@ci.lacey.wa.us

IN OLYMPIA:
City of Olympia Water Resources Program
P.O. Box 1967, Olympia, WA 98507-1967
Attn: Michelle Stevie
mstevie@ci.olympia.wa.us

IN TUMWATER:
City of Tumwater Water Resources Program
555 Israel Road SW, Tumwater, WA 98501
Tel: 360-754-4140 TDD: 1-800-833-6388

IN THURSTON COUNTY:
Thurston County Water Resources Program
929 Lakeridge Dr. SW, Olympia, WA 98502
Attn: Ann Marie Pearce
Tel: 360-754-3355 ext. 6857
TDD: 360-754-2933
StormwaterUtility@co.thurston.wa.us

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

Citizen Science Plankton Monitoring

This year we have extended our water quality plankton sampling program to include two exciting new sites, Long Lake Park (located in Lacey) and Pioneer Park (located in Tumwater). Join us and assist in the collection of plankton and measure water quality parameters, then view and identify samples under a field microscope. Working with Pacific Shellfish Institute we will screen for overall plankton diversity and for blue-green algae species, some of which produce harmful toxins during the warm summer months.

Harmful algal toxins that are detected are reported to both the Departments of Health and Ecology to help identify and track harmful algal blooms such as those that produce paralytic shellfish disease toxins.

To get an even closer viewing, join us after the What's Blooming in Budd events at LOTT WET Science Center to view the plankton on the projecting microscope and further discover what resides in the depths of Puget Sound!

No registration required, drop in at all three sites to join the fun!

Paralytic Shellfish Poison (PSP) is a naturally occurring marine toxin, called a "biotoxin," that is produced by some species of microscopic algae. Shellfish eat these algae and can retain the toxin. Humans can become ill from eating shellfish contaminated with PSP. This biotoxin affects the nervous system and paralyzes muscles, thus the term "paralytic" shellfish poison. High levels of PSP can cause severe illness and death. To learn more about PSP visit Washington State Department of Health's website at www.doh.wa.gov

CITIZEN SCIENCE PLANKTON MONITORING

NO REGISTRATION REQUIRED!

WHAT'S BLOOMING IN BUDD

- **Thurs., June 21 – Aug. 30 AND Sat., Sept. 15**
- **1 – 2 p.m.**
- **First, second and third Thursdays of month**
- **Port Plaza Dock near Anthony's Homeport , Olympia**

LOTT WET CENTER PLANKTON OBSERVATIONS

- **Thurs., June 21 – Aug., 30**
- **2:10 – 3 p.m.**
- **First, second and third Thursdays of month**
- **LOTT WET Science Center, 500 Adams, Olympia**

WHAT'S LIVING IN LONG LAKE

- **Thurs., June 28, July 26, Aug. 23 & Sat., Sept. 8**
- **1 – 2 p.m.**
- **Long Lake Park, 2790 Carpenter Road, Lacey**

PLANKTON AND WATER QUALITY OF PIONEER PARK

- **Sat., Aug. 4 • 1-2 p.m.**
- **Pioneer Park, 5801 Henderson Blvd SE, Tumwater**

PRIEST POINT PARK BEACH SEINE

- **Mon., July 23**
- **6 - 8 p.m.**
- **Priest Point Park: East Bay Drive, Olympia**
- **Main beach trail, past Shelter #2**

Priest Point Park Beach Seine

Pipe fish, starry flounder and sand lance... These are the few of the fish caught at our annual beach seine event. Join Stream Team and Washington Department of Fish and Wildlife biologists as we cast a net to see what critters we will find! Participants can help pull the net to shore to see the different species caught. Biologists will identify each species found in the net and discuss their importance to the health of our nearshore ecosystems and the challenges they face to survive.

Puget Sound is a complex estuarine ecosystem which supports more than 200 species of fish, 100 species of marine birds, 26 kinds of marine mammals, and thousands of smaller organisms. A vital part of the health of Puget Sound is its rich food web, which is critical to all marine life residing in it. From the smallest plankton to the largest marine mammals, all organisms depend on the productivity of Puget Sound for their survival. Bring your family and friends for a fun educational evening at the beach!

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

Get Your Boots Wet!

Monitor Local Streams this Summer!

An essential part of the food web and major food source for juvenile salmon are benthic macroinvertebrates or "stream bugs". These small aquatic insects live in the gravel layer at the bottom of streams. Macroinvertebrates can be indicators of stream health, as some species are tolerant of stream pollution and habitat disturbance, while others are very intolerant of disturbances and changes in water quality. This training will teach you why "stream bugs" are used as indicators of stream health. The training will also cover the monitoring protocol used to gather the samples

Amateur entomologist Dave Spiller will be joining us. Dave will talk about how fly fishers track the different "insect hatches" and which fishing flies emulate which aquatic insect.

After the training, you can sign up to monitor at one or more of our local stream sites. Stream Team staff will assist volunteers at each monitoring location. Monitoring dates are scheduled for varying days of the week to help accommodate busy schedules. Youth under the age of 14 must be accompanied by an adult. See calendar for various times and locations.

**Please note: The McLane Creek Nature Trail is managed by the Department of Natural Resources. A Discover Pass is required for parking at this trail. You can purchase a one-day or annual Discover Pass. For information about purchasing a pass, go to: www.discoverpass.wa.gov*

STREAM BUG MONITORING TRAINING

NO EXPERIENCE NECESSARY!

- **Tuesday, June 19**
- **6 – 8 p.m.**
- **McLane Creek Nature Trail*, 5044 Delphi Road SW, Olympia**

STREAM BUG MONITORING SCHEDULE

- **Wed., July 11 • 4-6 p.m. Woodland Creek**
- **Thurs., July 12 • 9-11 a.m. Moxlie Creek**
- **Wed., July 18 • 4-6 p.m. Indian Creek**
- **Thurs., Aug. 2 • 4-7 p.m. Schneider Creek**
- **Sat., Aug. 4 10 a.m. – 1 p.m. Percival Creek @ SPSCC**

Featured Creature

Bay Pipefish
(Syngnathus leptorhynchus)

Want to get a close-up view of these amazing creatures? Join us for our summer beach seine—we often capture pipefish in our nets!

Bay Pipefish *(Syngnathus leptorhynchus)*

The bay pipefish can be found in nearshore eelgrass beds, coastal wetlands and sloughs, and is abundant from Alaska to Baja California and Mexico. The pipefish's long, thin body and camouflaging greenish color mimics the swaying eelgrass where it lives. Pipefish have a distinguishing elongated snout and, in place of scales, they have jointed, bonelike rings that encircle their body and facilitate prey capture.

Pipefish are relatives of seahorses and have tiny dorsal, pectoral, and tail fins that beat rapidly as the fish leisurely swims. They usually swim in a vertical position and steer by moving their heads from side to side. Pipefish use their long, toothless snout to eat, slurping their prey. They eat plankton, small crustaceans, fish and fish eggs.

Pipefish are ovoviviparous, meaning that the eggs hatch and young develop inside the parents' body rather than being laid and hatched externally. Like other members of the sea horse family, the male has a specialized brood pouch where the females lay their eggs.

Females lay up to 225 eggs in the male's pouch where they are then fertilized. The male incubates the eggs and supplies nutrients to the embryos from his abdominal wall and bloodstream. Eggs hatch in approximately two weeks depending on water temperature and are born as live miniatures of the adults.

Pipefish become sexually mature at 60-80 days and can reproduce throughout the year where ocean temperatures are warm. Pipefish in California have been documented to raise 12 broods a year. In geographical areas farther north where the water is colder, their reproductive season may be limited to two months. As a survival tactic in colder climates, a female may choose to lay eggs in multiple males' pouches to ensure that more of her young survive.

MARINE CREATURE MONDAYS

- **Mon., July 16 or July 23 or July 30**
  Mon., Aug. 6 or Aug. 13 or Aug. 20
- **Two sessions: 11:30 a.m. or 1 p.m.**
- **Boston Harbor Marina, 312 73rd Ave NE, Olympia**
- **Registration Required. Please only sign up for one session; space is limited.**

Marine Creature Mondays

Many species of animals, from the microscopic to large whales, call Puget Sound home. Rarely do we get the chance to see what resides below the surface. At this popular, all-age event, you will get to experience first-hand what lives below the dock. Come find out what wonders the divers will find!

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

10 Trails in Thurston County ....

HIKES

The Deschutes Valley Trails

The City of Tumwater plans to connect 2.7 miles of trail along the Deschutes River, connecting Pioneer Park, Palermo Pocket Park, Deschutes Valley Park, Tumwater Falls Park, and Tumwater Historical Park. From the Tumwater Historical Park, you can already travel a short distance to the Capitol Lake trail system. While these parks aren't connected yet, you can still take a journey along the Deschutes River to discover historical railways and breweries and view local wildlife. Tumwater Falls is an especially powerful show of nature, with the Deschutes River cascading down two waterfalls.

Enjoy any, or all, of these trails this summer, and be sure to check out the grand opening after the Deschutes Valley Trail is completed.

Watershed Park

Enjoy this urban getaway in the heart of Olympia. From Henderson Road, or Eastside Street SE, you can park and enter Watershed Park, or enter the park from any of the various pedestrian pathways. A short downhill descent will connect to a loop trail, 1.4 miles in length, which tours Moxlie Creek. While at Watershed Park, you might forget you're in the middle of a city! This trail contains steep climbs and boardwalks, and may not be accessible for all hikers.

Priest Point Park

Discover Ellis Cove and Mission Creek via several trails at Priest Point Park in Olympia. From East Bay Drive you can enter the east side of the park and find a series of trails traveling north and west toward Ellis Cove. Or, enter the west side of the park and find a short hike down to the shoreline at Budd Inlet for a magnificent view of East Bay and the Capitol. Priest Point is an excellent place to observe birds, mammals and other aquatic wildlife. This trail contains many steep climbs, steps, and boardwalks and may not be accessible for all hikers.

NATURE WALKS

Mima Mounds Natural Area Preserve

The Mima Mounds, found 20 short minutes south of Olympia, provide both a getaway and a mystery. Scientists still haven't come to a consensus about the formation of these mounds, and visitors to Mima Mounds have wondered about them for centuries.

Enjoy the half mile paved loop, or a longer gravel path, meandering through the mounds. Discover butterflies, native wildflowers and Washington prairie habitat. Summer hours are from 8 a.m. – 8 p.m. Due to the sensitive nature of the Mima Mounds, no dogs are allowed. Discover Pass required.

Discover the mystery of the Mima Mounds this summer!

Lake Lois Habitat Reserve

Observe wildlife at the Lake Lois Habitat Reserve. From the Safeway parking lot on Carpenter Road SE in Lacey, or the Lake Lois Road SE entrance, take a short walk around an interpretive trail along Lake Lois. In this small wetland ecosystem, birds and other wetland wildlife can be spotted. This trail is short, but contains many roots, rocks, and other obstructions, so watch your step.

Billy Frank Jr. Nisqually National Wildlife Refuge

Enjoy a stroll through permanent freshwater wetlands, and a tidally influenced estuary. The Refuge is the premier location in Thurston County to see countless species of birds, mammals, and other wildlife. As a stop along the great Pacific Flyway, birds migrating from as far away as South America or Alaska stop in The Refuge. Watch Bald Eagles perch and hunt, check out some Blue Herons up close and personal, and discover all sorts of waterfowl. There are over two miles of gravel and boardwalk trails throughout The Refuge.

The Refuge charges a $3 daily parking fee for up to 4 adults. Children under 16 are free. Dogs, biking, and jogging are not permitted in order to allow for uninterrupted bird viewing for visitors.

Grass Lake Nature Reserve

Another gem in Olympia! This one mile loop, accessible from Kaiser Road NW, has documented sightings of over 100 bird and 200 plant species. These wetlands drain into Green Cove Creek, which drains into Eld Inlet. Intact wetlands support wildlife, water quality, and native plants, and this park preserves this important ecosystem for all of us!

....to Discover this Summer!

LONG DISTANCE BIKING OR JOGGING

Millersylvania State Park

Get out the hiking boots and mountain bikes! Millersylvania State Park has 7.6 miles of biking trails and 8.6 miles of hiking trails surrounding Deep Lake. The park is located between Olympia and Centralia, providing a quick weekend get-away. The park has water activities, trails, mountain biking, and so much more! Discover Pass required.

Chehalis-Western Trail & Yelm-Tenino Trail

Need a longer trail? Did you know that the Chehalis-Western Trail is 21 miles long and connects to the 14.5 mile long Yelm-Tenino Trail? Thurston County's Chehalis-Western and Yelm-Tenino Trails follow historic railways, the Deschutes River, and other points of interest along the way. The Chehalis-Western Trail crosses through Lacey and Olympia, with access points at Woodard Bay Road, Chambers Lake, and other locations. This paved trail is great for running, biking or just taking a short walk along one of its many scenic views.

SHARE your favorite hikes or photos from one of our 10 Trails to Discover on Facebook at **www.facebook.com/ThurstonStreamTeam**

Teach People about Salmon:

Train to Become a Salmon Steward!

Each fall, adult Chinook salmon make their journey back to the Deschutes River to spawn in the same river as their ancestors before them. These fish have spent three to five years growing in the ocean, with some of them traveling as far as Alaska before they return! Become a Salmon Steward by participating in a series of classes where you can learn about this local icon and docent skills. Salmon Stewards have the exciting opportunity to share the delight of the return of the salmon with others!

At the three weekday evening classroom trainings, Salmon Stewards learn about the Deschutes River hatchery Chinook, including their life cycle and habitat needs and human impacts on the salmon population. Two Saturday field trainings are offered: 5th Avenue Dam in Olympia and Tumwater Falls Park. Salmon Stewards are required to attend the field training at each location where they plan to work as docents.

Trained Salmon Stewards volunteer at one or both popular local Chinook salmon viewing locations: late August through September at the 5th Avenue Bridge and/or mid-September through early October at Tumwater Falls Park.

Additionally, classroom and field training for the McLane Creek chum run will occur in the fall. Details will appear in the Fall 2018 issue of Stream Team News and on the Stream Team website.

Required Training: New Salmon Steward volunteers must attend all three Basic Trainings and at least one of the field trainings. To register, visit www.streamteam.info and click on "register". For more information, contact Michelle at mstevie@ci.olympia.wa.us

Salmon Stewards Training Dates:

Date	Time	Location	Content
Tuesday, **July 17**	6 – 8:00 p.m.	Olympia City Hall	**Basic Training Part 1:** Life History Cycle
Wednesday, **July 25**	6 – 8:00 p.m.	Olympia City Hall	**Basic Training Part 2:** The 4 – H's: Habitat, Hatcheries, Hydro-dams, Humans
Wednesday, **August 1**	6 – 8:30 p.m.	Olympia City Hall	**Basic Training Part 3:** Harvest Management
Friday, **August**	9 – 10:30 a.m.	5th Avenue Bridge Dam	**Field Training:** Docent skills, dam operation
Saturday, **September 15**	10 a.m. - 1:00 p.m.	Tumwater Falls Park	**Field Training:** Docent skills, hatchery operation, history walk

Featured Waterbody

Woodland Creek: A History

Till:

The material that is eroded and moved by glaciers. Generally, till forms along the sides and "front" of the glacier, and the material left behind is of random size.

Erratics:

Large boulders picked up by glaciers as they advance, and then dropped in a different location as the glacier retreats. These large boulders could be on top of hills or in the middle of fields, and often do not match the local rock type.

Outwash:

Glacial outwash is produced as glaciers melt, and the deposition of outwash is determined by the flow of water. When water moves quickly, larger pieces of rock and sediment can be moved, and only when water moves very slowly or is still can smaller silt and clay materials fall to the bottom of a waterbody. Unlike till, it is very well sorted, due to the movement of water.

Woodland Creek: A History

Woodland Creek begins at Hicks Lake. From Hicks Lake, the stream flows through Pattison Lake, Long Lake, and finally Lake Lois. This horseshoe-shaped chain of lakes, most likely formed by glaciers, now support homes, recreation and a wildlife preserve at Lake Lois. From Hicks Lake to the southern end of Henderson Inlet, Woodland Creek flows nearly 11 miles and drains roughly 30 square miles of land. An overwhelming majority of this land is developed. As with any highly developed watershed, Woodland Creek faces many water quality issues.

But first, let's go back and see how Woodland Creek was formed. With any river or stream, they have a long and complicated history. This history will begin with the most recent glaciation of Puget Sound.

Between 15,000 and 20,000 years ago, the Vashon Glaciation shaped most of the Puget Sound. U-shaped valleys, till and erratics are all evidence of these large ice sheets eroding, pushing and dropping rocks on our landscape. The Vashon Glaciation left behind a legacy in the upper and lower Woodland Creek watershed. The upper watershed is largely made up of till and outwash. Glacial till is material that is pushed by the glacier in front and at its sides and consists of a variety of different sized materials (rocks, sediment, and clays). Glacial outwash is left behind after a glacier begins to melt and sediment picked up by the glacier is sorted by the movement of liquid water. Where water moves quickest, only large sized rocks will settle, and where water moves more slowly, clays and sands will settle out. Finally, as the Vashon Glaciation retreated, clay sized particles called "rock flour" settled into the fresh water lake the glaciation had created in the Puget Sound. This fine clay material makes up most of the geologic deposits in the lower Woodland Creek Watershed. The surface of the Woodland Creek watershed is defined by this glaciation.

Non-native settlement of the area began in earnest in 1845. Settlers came from the Midwest and East Coast via the Oregon Trail to settle the area. A prominent

BAT TALK

REGISTRATION REQUIRED

- **Fri., June 22 • 7 p.m.**
- **Traditions Café and World Folk Art, 300 5th Ave SW, Olympia**

BAT WALK

REGISTRATION NOT REQUIRED

- **Fri., June 22 • 9 p.m.**
- **Heritage Park on Capitol Lake, across from Traditions Café, Olympia**

What do human fingertips and bat wings have in common? Both have tactile sensory cells (cells that have the sense of touch) called Merkel cells, which are only found in the skin of vertebrates. Want to learn more about these intriguing flying mammals? Join us and local bat expert Greg Falxa for a fun, fact-filled bat talk and walk to learn about bat habitat needs, basic bat biology and their unique life strategies.

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

landowner, Issac Woods, built a farm, nicknamed "Wood Lawn", north of Hicks Lake in 1852, giving way to the name "Woodland." Rollin Wood, Issac's son, later suggested it as a name for the surrounding community. However, the U.S. Post Office forced Woodland to re-christen itself again in 1891, as there was another town in Washington State with the same name. Until 1930, Woodland Creek was known as Mill Creek, suggesting the importance of mills in the area. But, in 1930, the stream was renamed for the Issac Wood family, and their "Wood Lawn" farm.

Along a small stretch of Woodland Creek, the Himes family converted prairie and forest land to grazing lands in the 1800s. In 1990 the City of Lacey purchased this parcel of land, and created Woodland Creek Community Park. Efforts to reforest the near-stream habitat with native trees and shrubs has been ongoing since the park was purchased.

Woodland Creek has been a site for ongoing restoration due to the concentrated development and the dense suburban population in this watershed. Woodland Creek's proximity to numerous shopping centers, I-5, and other major roads has led to a number of water quality issues in the stream. Woodland Creek is currently on the Environmental Protection Agency's (EPA) list of impaired waters due to high temperature and low dissolved oxygen. Water temperature in streams often increases because of a lack of shady canopy cover from trees along the stream banks. Dissolved oxygen also requires stream temperatures to be lower; cooler water carries more oxygen. Woodland Creek also contains elevated amounts of fecal coliform bacteria, which is a danger to both human activity and fish and wildlife living in or around the stream. The main sources of fecal coliform bacteria in the Woodland Creek sub-watershed are on-site septic systems and pet waste. In order for Woodland Creek to support salmon, other aquatic wildlife, and human recreation, temperature and dissolved oxygen levels have to be restored to natural levels. Further, fecal coliform bacteria sources must be identified and controlled.

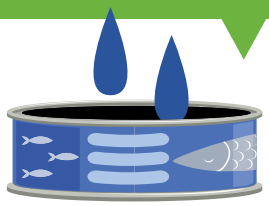
Improvements to the Woodland Creek sub-watershed have been made in the last 16 years. Significant declines in fecal coliform were found across the entire Henderson Inlet watershed, where Woodland Creek is located. However, it is important to recognize the work that needs to continue. Restoration of near-stream habitat is critical to lowering stream temperatures and increasing dissolved oxygen. Pet owners across the region need to clean up their pet's waste regularly to prevent bacteria from entering our surface waters. Residents of the Woodland Creek watershed can encourage friends and neighbors to join them in scooping the poop! You can participate in the restoration of near-stream habitat that is critical to lowering stream temperatures and increasing dissolved oxygen. Due to the hard work of our residents, volunteers, and community partners, Woodland Creek may one day be removed from the impaired water list and foster more salmon and other wildlife populations!

Kids' CORNER

Ask your parents to POST A PICTURE OF YOUR SCAVENGER HUNT FINDS & RAIN GAUGES on the Stream Team Facebook Page! Your photos may be featured in a future Stream Team Facebook Post!

@ ThurstonStreamTeam

Make Your Own Rain Gauge



Materials: 1 Clean Tuna Can
Placement: Your Lawn

Water wisely! Lawns only require 1 inch of rain per week. Measure how much water your lawn has received from rain and sprinklers during the week: when the rain gauge (tuna can) is full, your lawn has received enough water!

Decorate your Rain Gauge! Be as creative as you can!

Bedazzle It!

Using Glue, Gems, Glitter, and other shiny object, bedazzle your rain gauge!

Paint It!

Using outdoor quality acrylic paints, you can design your own rain gauge!

Make it a Creature!

Using household items for ears, nose, and purchasing a pair of googley eyes, you could have your own Rain Gauge Creature!

Summer Scavenger Hunt BINGO!

Visit any of the local hikes on pages 6–7 and see if you can spot these native plants and animals!

Blue Heron	Salmonberry	Sword Fern	Deer	Stream
Bald Eagle	Wetland	Stream	Hawk	Fish
Butterfly	Ducks	Free Space	Huckleberry	Squirrel
Native Flower	Songbird	Douglas Fir	Cat Tail	Rabbit
Purple Martin	Spiderweb	Nurse Log	Binoculars	Bee

MON | TUES | WED

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

JUNE

Bat Talk

REGISTRATION REQUIRED

Fri., June 22 • 7 p.m.

Traditions Café and World Folk Art, 300 5th Ave SW, Olympia

Bat Walk

REGISTRATION NOT REQUIRED

Fri., June 22 • 9 p.m.

Heritage Park on Capitol Lake, Across from Traditions Café

Join us for a fun, fact-filled bat talk and walk with local bat expert, Greg Falxa. For more info., contact Michelle at mstevie@ci.olympia.wa.us Register online. See page 9 for details.

Stream Bug Monitoring Training

Tues., Jun. 19 • 6 – 8 p.m.

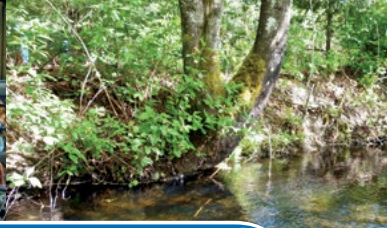
McLane Creek Nature Trail*, 5044 Delphi Rd. SW, Olympia

For more info., contact Michelle at mstevie@ci.olympia.wa.us Register online. See page 4 for details.

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



Stream Team *Events*

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

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

JULY

2nd Annual Purple Martin Lollapalooza!

Fri., July 20 • 7 a.m. – 7 p.m.

East Bay @ Corner of Marine Drive and Olympic Ave, Olympia

Help monitor the nest boxes throughout the day to identify fledgling success.

For more info., contact Michelle at mstevie@ci.olympia.wa.us See page 2 for details. Register online.

Woodland Creek Community Park Watering Party

Sat., July 21 • 10 a.m. – Noon

6729 Pacific Ave SE, Lacey

Help Stream Team water new plants. Buckets, gloves and drinking water provided. Wear long pants, closed-toe shoes and sun protection. For more info., contact streamteam@ci.lacey.wa.us

Priest Point Park Beach Seine

Mon., July 23 • 6 – 8 p.m.

Priest Point Park, 2600 E. Bay Drive NE, Olympia, Main beach trail past Shelter #2

Cast a net to see what critters we will find! Participants can help pull the net to shore to see the different species caught. For more info., contact Michelle at mstevie@ci.olympia.wa.us See page 4 for details. Register online.

AUGUST

Woodland Creek Community Park Watering Party

Thurs., Aug. 9 • 4 – 6 p.m.

6729 Pacific Ave SE, Lacey

Help Stream Team water new plants. Buckets, gloves and drinking water provided. Wear long pants, closed-toe shoes and sun protection. For more info., contact streamteam@ci.lacey.wa.us

ALL SUMMER

Citizen Science Plankton Monitoring

What's Blooming In Budd

Thurs., June 21 – Aug. 30 & Sat., Sept. 15
1 – 2 p.m.
First, second & third Thursdays of month

Port Plaza Dock near Anthony's Homeport, Olympia

LOTT Wet Center Plankton Observations

Thurs., June 21 – Aug., 30 • 2:10 – 3 p.m.
First, second & third Thursdays of month

LOTT WET Science Center, 500 Adams, Olympia

What's Living in Long lake

Thurs., June 28, July 26, Aug. 23 & Sat., Sept. 8 • 1 – 2 p.m.

Long Lake Park, 2790 Carpenter Road, Lacey

Plankton & Water Quality of Pioneer Park

Sat., Aug. 4 • 1 – 2 p.m.

Pioneer Park, 5801 Henderson Blvd SE, Tumwater

No registration required!

Assist in the collection of plankton and measure water quality parameters, then view and identify samples under a field microscope. To get an even closer viewing, join us after the What's Blooming in Budd events at LOTT WET Science Center to view the plankton on the projecting microscope. For more info., contact Michelle at mstevie@ci.olympia.wa.us See page 3 for details.

McLane Creek Nature Trail Maintenance

Thurs., June 14 • Tues., July 17
Mon., July 30 • Wed., Aug. 29
3 – 6 p.m.

McLane Creek Nature Trail, 5044 Delphi Rd. SW, Olympia*

Help maintain both access and ecological diversity at the McLane Creek Nature Trail! Wear sturdy shoes or boots and dress for the weather. Gloves, tools and light refreshments provided. For more info., contact Erica Guttman at nativeplantsalvage@gmail.com Register online.

Stream Bug Monitoring

Wed., July 11 • 4 – 6 p.m.
Woodland Creek

Thurs., July 12 • 9 – 11 a.m.
Moxlie Creek

Wed., July 18 • 4 – 6 p.m.
Indian Creek

Thurs., Aug. 2 • 4 – 7 p.m.
Schneider Creek

Sat. Aug. 4 • 10 a.m. – 1 p.m.
Percival Creek @ SPSCC

Directions to sites will be sent prior to sampling date.

For more info., contact Michelle at mstevie@ci.olympia.wa.us See page 4 for details. Register online.

Marine Creature Mondays

REGISTRATION REQUIRED

Mon., July 16 or July 23 or July 30
Mon., Aug. 6 or Aug. 13 or Aug. 20
Two sessions: 11:30 a.m. or 1 p.m.

Boston Harbor Marina, 312 73rd Ave NE, Olympia

Please only sign up for one session; space is limited.

At this popular all-age event you will get to experience first-hand what lives below the dock. Come find out what wonders the divers will find! For more info., contact Michelle at mstevie@ci.olympia.wa.us See page 5 for details. Register online.

Salmon Stewards Basic & Field Trainings

Several Dates in July, August & September

See page 7 for details. Register online.

Please note: A Discover Pass is required for parking at the McLane Creek Nature Trail. You can purchase a one-day or annual Discover Pass. For information about purchasing a pass, go to: www.discoverpass.wa.gov

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

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

It's More Than Just Dirt

So you're trying to raise money for your sports team, church or school. You'd like to host a fundraiser that is simple and fun for everyone. The weather's been warm and Aha!, you think, a carwash will be easy. You grab your washcloths, volunteers, and soap.

But wait! Have you ever stopped to think about where all of that dirty water goes once it's rinsed from the cars and hits the pavement? Sure, it gets swallowed up by a nearby storm drain. But that's a problem.

Did you know that water flowing into most storm drains isn't treated? Instead, that soapy, murky water eventually ends up in our rivers, creeks, lakes, and Puget Sound. Even if you use biodegradable soap, car wash water contains detergents, gasoline, heavy metals, and other toxic chemicals that can harm aquatic life and make our waterways unhealthy for swimming and fishing. Not only that, it is actually illegal to put anything down a stormdrain that isn't rainwater or snowmelt.

Environmentally friendly car wash fundraisers can also be challenging. Some cities in the Puget Sound area provide car wash kits that block storm drains and channel dirty water to areas where it can soak into the ground. However, one study by the City of Bellevue found that loaned car wash kits were used improperly 47% of the time! This means with even the best intentions, many pollutants get into our local waterways. As you put away your buckets and hoses, don't be discouraged. Many fun and creative fundraisers do not cause stormwater pollution. Here is a list of great ideas to inspire you:

- **Sell commercial car wash tickets.** Commercial car washes pipe used water into treatment facilities. Visit charitycarwash.org to learn more.
- **Sell eco-friendly products** such as reusable shopping bags or water bottles. Try featuring your own artwork or sports team logo.
- **Sell local coupon books.**
- **Partner with a local business to host** a bingo or trivia night and share a portion of profits from the evening.
- **Host a fun run at your school.** You can even add obstacle courses.
- **Hold an auction.** Include items such as themed gift baskets or lunch with senior staff members.

If you've had success with environmentally friendly fundraisers, we would love to hear about it! Please contact the Stream Team coordinator in your jurisdiction so we can share your experience in an upcoming newsletter.

A commercial car wash is the best way to clean your vehicle without polluting our local surface and ground water.

• TIP •

If you are at home, wash your car over grass or gravel so that the wash water infiltrates into the ground. (Just make sure you do not park over underground septic or irrigation systems.)