

Stream Team

WINTER 2023 December-February



Bugs as Vital Signs

**Comprehensive Plan Updates:
What's Your Vision for the Future?**

EDUCATE • PROTECT • RESTORE
OLYMPIA • LACEY • TUMWATER • THURSTON COUNTY

Contents

Sleuth Your Way Through Brewery Park This Winter ..	2	Who’s “Calling” this Fine Wet Day?	7
Native Plants in the Winter	3	Boldt Decision—Fishing Rights and Salmon	
Beavers in the Urban Landscape Part 4	4	Recovery.....	8
Bugs as Vital Signs	5	Comprehensive Plan Updates:	
Macroinvertebrates: Who’s at the Top of this Food		What’s Your Vision for the Future?.....	9
Chain?	5	Kids' Corner.....	10
Creature Feature: Rough-skinned Newts—Adorable		Calendar of Events	11
AND Deadly	6	Preventing Stormwater Pollution—“If You See	
6PPD Quinone is Killing Coho...But WHAT is It?	7	Something, Say Something!”	12



Did You Know? Articles marked with a damselfly icon, like the one on the left, will be posted on our website in the Reference Library.

Sleuth Your Way Through Brewery Park This Winter

Brewery Park at Tumwater Falls is the perfect place to feel like you’re on an adventure while still staying relatively urban in Thurston County. Tumwater Falls was founded in 1962 by the Olympia Tumwater Foundation to honor both the history and the future of the park. Today, the park is maintained as a relaxing and restorative place to view salmon in the fall, and to simply enjoy all year round.

Brewery Park is just one of the many parks to sleuth your way through! With over 30 locations, Nature Sleuths adventures are practically endless. Whether you’re looking for a fun winter wonderland to explore with your family, or trying to walk more for a New Year’s resolution, our Nature Sleuths locations have it all.

Using the GooseChase app on your tablet or smartphone, explore and sleuth your way through one or all of our local parks. Complete each park’s mission and receive a Nature Sleuth (park specific) sticker and be entered into a drawing for cool prizes! Learn more at streamteam.info/nature-sleuths.





Native Plants in the Winter

Winter is a great time to slow down, reflect, and prepare for the year ahead. Similarly, plants photosynthesizing slows down as daylight hours dwindle. This allows them to store energy in their roots or tubers and brace for colder, harsher weather. Annual plants will typically die back completely over the winter months, leaving behind seeds to grow into the next generation the following season.

The colder months in the Pacific Northwest are the best time of year to plant many native plant species. Mild temperatures and plentiful rainfall on the coastal side of the Cascades makes for excellent conditions for plants to establish hearty root systems.

These climate features also provide us with a beautiful evergreen wonderland all winter long, with native conifer trees like *Pseudotsuga menziesii* (Douglas fir), *Tsuga heterophylla* (Western hemlock), and *Thuja plicata* (Western red cedar). At ground-level, *Polystichum munitum* (sword fern), *Gaultheria shallon* (salal), and *Vaccinium ovatum* (Evergreen huckleberry) remain vibrant providing contrast to the gray skies of winter.

Washington's native plant species provide much more in environmental services than just their beauty. Growing your own native plants benefits soil, insects, birds, other animals, and you! And because native plants have adapted to thrive in the PNW climate, they don't require much additional care.

Thurston Conservation District Native Plant Presale

- Now–Jan. 31, 2024
- Pick up plants first week of Mar. 2024 at Thurston County Fairgrounds
- store.thurstoncd.com

Native Plant Salvage Winter Twig ID Class

- Jan. 21, 2024
- 10 a.m.–3:30 p.m.
- McClane Creek Nature Trail
- tinyurl.com/twigid

Native Plant Salvage Plant Salvages

- tinyurl.com/npsalvage

Thurston Conservation District Native Plant Festival & Sale

- Sat. Mar. 2, 2024
- 10 a.m.–3 p.m.
- store.thurstoncd.com/2020-sale-details

Here are just a few benefits of native plants:

Drought Tolerance

Native plants drink up winter's rains and can survive dry summers with less watering than their non-native counterparts. This means you can save on your water bill!

Food Source

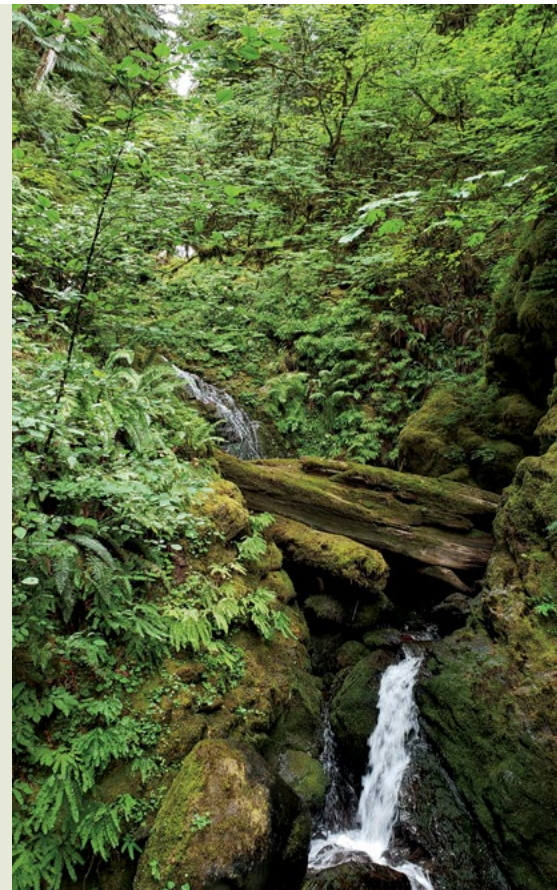
Flowers of many native plants provide nectar, attracting native bees and hummingbirds. Their fruits are food for birds and mammals—including humans!

Weed Prevention

Species like sword fern and salal grow into dense groupings and can prevent weeds from taking over.

Habitat

Clusters of vegetation at varying heights provide ample nesting materials and spaces for critters to build homes and find refuge. Dense canopies also provide shade and cooler temperatures in the summer.



Find an excellent, online resource for Washington native plants at the University of Washington's Burke Herbarium. This resource catalogs photographs and scientific information for more than 89,000 Washington plants and fungi. It also provides identification and taxonomic keys and maps of plant distribution. Visit the burke herbarium at burkeherbarium.org.

There are truly countless ways that we all benefit from native plants! Whether you are looking for a class to guide you in selecting and planting your own native rain garden or want to learn how to botanize and identify bare twigs while enjoying a crisp winter walk, opportunities abound in Thurston County!

Beavers in the Urban Landscape Part 4



Over the past year, Stream Team has taken a journey into the lives of beavers. **Part 1** explored their biological and social characteristics, **Part 2** highlighted a day-in-the-life of our friendly neighborhood beaver, and **Part 3** explored effective techniques for managing beavers in urban settings. In this installment, we'll talk about how beavers help us manage our water resources as we face a warming climate.

In 2023, the Northwest experienced one of the longest and driest summers in recent history. This warming trend is predicted to continue. Increased warming and extended periods without rain translates to greater demands on our streams, lakes, and aquifers, with damaging effects to fish and macroinvertebrate habitat due to low flows and warmer water temperatures.

As scientists and engineers turn to adaptive management techniques, beavers are being seen as a potential partner in our efforts to combat warming climate effects. Recent studies focusing on beaver habitat impacted by wildfires and drought demonstrate more resilient ecosystems capable of faster recovery. This is due to the natural engineering characteristics these animals bring to their environment.



Beavers enhance the overall resilience of ecosystems. By maintaining wetlands and creating habitats, they help buffer the impacts of extreme weather events. In the face of a changing climate, promoting coexistence with beavers and protecting their habitats can contribute to the overall health and resilience of our ecosystems. Much more work is needed to learn about, coexisting with beavers in the urban landscape. But one thing is certain, their role is crucial to the overall health of our waterways, and as we look to the future it is certain beavers will be one of society's unsung heroes.

Here's how beavers engineer the landscape:



Water Storage and Regulation:

Beaver dams slow the flow of water in streams and rivers, helping to prevent stream bank erosion. Dams also create ponds and wetlands, which serve as natural reservoirs. During periods of heavy rainfall, these wetlands store excess water, reducing the risk of flooding downstream. Conversely, during dry periods and droughts, these reservoirs release stored water, helping to maintain water flow in streams and support aquatic life.



Groundwater Recharge:

Beaver ponds and wetlands allow water to seep into the ground, feeding underground aquifers. This process, known as groundwater recharge, helps to maintain water levels in wells, springs, and streams, even during dry spells. Groundwater is a critical source of drinking water in Thurston County.



Improved Water Quality:

Beaver ponds act as natural filters. They trap sediments and pollutants, allowing cleaner water to flow downstream. This improves water quality and benefits aquatic ecosystems, including fish populations.



Habitat Creation:

Wetlands and ponds created by beavers are some of the most biodiverse habitats on earth. Home to aquatic species like fish, amphibians, and insects, as well as terrestrial species such as waterfowl, mammals, and birds, these habitats become even more critical during drought conditions when water sources become scarce.

Bugs as Vital Signs

Macroinvertebrates a.k.a. stream bugs are sensitive to changes in their watery world, including erosion, low oxygen levels, warm temperatures, and pollution. Akin to a routine checkup where a doctor takes your vital signs or looks at your blood work, measuring a creek's Benthic Index of Biotic Integrity (B-IBI) helps alert scientists to a potential water quality problem. A B-IBI score is calculated by collecting stream bugs and sending them to a lab where an entomologist counts the number of bugs and the different kinds of species.

Measuring the B-IBI is a powerful tool for understanding and responding to local creeks and stream changes. Over time, repeated B-IBI assessments show long-term trends in water body health, making it easier to identify and address issues. Finding pollution-intolerant bugs in the sample is a sign the water is clean, the habitat is suitable, and it will earn the creek a high B-IBI score. Finding many pollution-tolerant bugs will give the creek a lower B-IBI score and may indicate that the stream needs help.

Good News!

"Most B-IBI scores [around Puget Sound] have either improved or remained stable. While development has increased in the region, stream health has improved in more than one of five streams and declined in only one of 50 streams. **This trend may be due in part to stream and riparian restoration as well as historic and ongoing actions that aim to control and treat stormwater.**"

— Puget Sound Vital Signs (vitalsigns.pugetsoundinfo.wa.gov/VitalSignIndicator/Detail/16)



Photo Credit: Michele Burton

Stream Team sponsors community science opportunities for the public to collect B-IBI each summer! To learn more about stream bugs, visit the **Summer 2023 Stream Team Newsletter** (pages 4–5). Next summer, join us as a volunteer to collect more bugs!

Macroinvertebrates: Who's at the Top of this Food Chain?

In freshwater stream systems, stream bugs can exhibit aggressive behavior. Their level of aggression can vary depending on factors such as food availability, population density, and environmental conditions. Aggression between these organisms is a natural part of freshwater ecosystems, each playing a role in maintaining ecological balance.

Let's take a closer look at some of these aggressive or competitive macroinvertebrates:

- **Dragonfly and Damselfly Nymphs.** The nymphs of dragonflies and damselflies are aquatic predators with extendable mouthparts. They can capture and consume a variety of aquatic organisms, including other macroinvertebrates.
- **Crayfish.** Crayfish can be highly competitive and often engage in battles over shelter and food resources. In some cases, they may even prey on smaller aquatic organisms.
- **Predatory Aquatic Beetles.** Some aquatic beetles, like the diving beetles, eat other living creatures. They have powerful jaws and are known to attack and consume other aquatic organisms, including smaller insects and even small fish.
- **Giant Water Bugs.** Giant water bugs are large insects that have a piercing-sucking mouthpart. They use their mouths to capture and feed on prey such as small fish and insects.
- **Stonefly Nymphs.** Stonefly nymphs hunt small invertebrates and organic waste. They are equipped with strong mandibles for grasping and consuming prey.
- **Water Scorpions.** Water scorpions are aquatic insects that use their long, slender forelimbs to capture prey. They are skilled hunters who prefer hunting smaller aquatic organisms.

Get a closer look! Sign up for our macroinvertebrate workshop this spring, where you too can become a macroinvertebrate sampler! We guarantee, after spending time collecting and viewing the benthic world, the diverse world of water will take on a whole new meaning.

CREATURE FEATURE



Rough-skinned Newts— Adorable AND Deadly

Rough-skinned Newts (*Taricha granulosa*) are a fascinating amphibian found right here in Thurston County and throughout the Pacific Northwest! A medium sized salamander, grows 4 to 7 inches long and has a unique appearance with brown, bumpy skin. Their large heads and blunt noses distinguish them from other salamander species.

Newts display a brightly colored underside when threatened, which acts as a warning sign to other predators that they are toxic. The glands of these semi-aquatic amphibians produce a potent neurotoxin called tetrodotoxin. The toxin can cause mild skin irritation if touched and can be fatal to animals and humans if ingested. If you touch a Rough-skinned Newt, avoid touching your face and wash your hands immediately. If you see this little creature out in the wild, it's best to keep your distance.

As an insect eater, Rough-skinned Newts help control insect populations, including mosquitoes. They are a main food source for common garter snakes, which are in turn eaten by other animals. Garter snakes that coexist with Rough-skinned Newts develop a molecular defense against tetrodotoxin, making them a key predator.

Rough-skinned Newts spend most of their time on land and can be found in cool, damp forests under rotted pieces of wood, stumps, and stones. During warmer months and mating season, you're more likely to find them in shallow streams, lakes, and ponds.

The Rough-skinned Newt must return to water to breed, as mating takes place underwater. They are one of only three amphibians in Washington that, after mating lay a single egg, but this newt is the only one that hides its eggs in underwater vegetation. The ova, or egg, is 0.7 inches in diameter with a cream-



colored jelly outside that protects the egg. The eggs hatch in 3 to 4 weeks and the larvae begin their journey to adulthood.

Fascinating Facts:

- A single Rough-skinned Newt is poisonous enough to kill an estimated 25,000 mice.
- Newts reach sexual maturity in 4 to 5 years and can live up to 18 years in the wild.
- Newt parents do not care for the eggs or larvae.
- Rough-skinned Newts are not listed as threatened or endangered, but like many amphibian species, their habitat is increasingly threatened by human development and pollution.

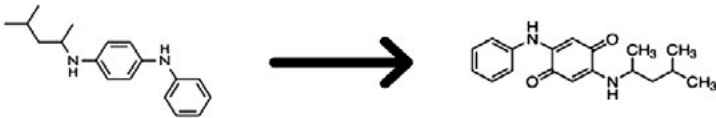
Urban population growth often puts pressure on wildlife populations' habitat and food sources. As more hard surfaces are built, stormwater runoff increases, carrying harmful pollutants to streams and water bodies that the newt, along with other animals rely on to survive.

What can you do to help our amphibian friends?

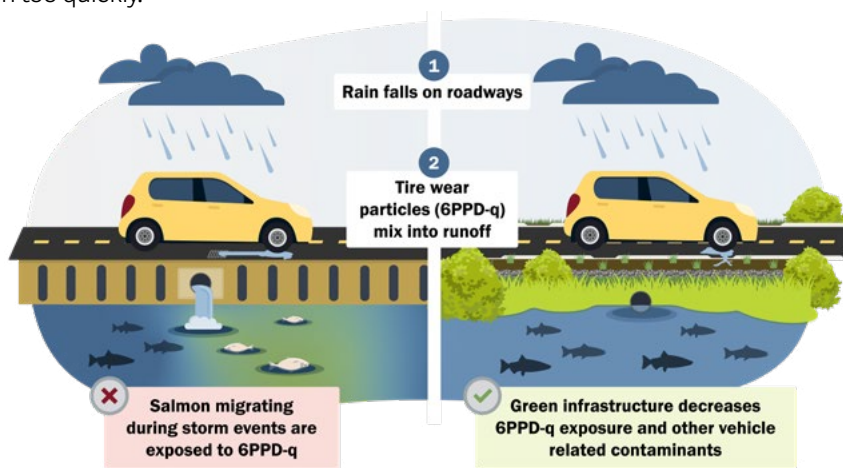
- Report spills (see our article on page 12).
- Check for and fix vehicle leaks.
- Bag and trash your pet's waste.
- Sweep your driveway.
- Pick up litter when you're on a walk.
- Use a commercial carwash.
- Drive less.

6PPD Quinone is Killing Coho... But WHAT is It?

We didn't all love chemistry class, and even those of us who did, likely don't know 1/1000th of the chemical compounds today. So, what is 6PPD Quinone, and what does it have to do with stormwater? Let's start from the beginning.



6PPD Quinone always begins as 6PPD, or N-(1,3-DIMETHYLBUTYL)-N'-PHENYL-P-PHENYLENEDIAMINE—a chemical compound created in the 1950s to stabilize rubber. By the 1960s it was used regularly in car tires to keep them from cracking and breaking down too quickly.



We assume nobody knew that once 6PPD interacted with ozone, the chemical structure changed from something stable to something volatile, proving to be especially harmful to our coho salmon. In the year 2020, after years of stormwater chemical isolation studies led by scientists at the University of Washington and WSU, 6PPD-q was recognized as one of the most toxic aquatic contaminants known. It has been directly linked to pre-spawn mortality in coho salmon, even at very low concentrations.

But how does 6PPD-q get from our car tires to coho salmon? Well, just like anything (even with super preservatives in their mix), tires degrade. As tires lose tread, tiny tire particles left along roadways are washed into local streams when it rains or snows.

What do we do?

Two stormwater management practices are proving effective at preventing tire particles and other street chemicals from reaching our streams:

1. Regular street sweeping
2. Green Stormwater Infrastructure (GSI): Storm system designs that mimic nature using a mix of plants, soil, and microbes to collect, hold, and filter polluted stormwater

Research is underway to find alternate chemical preservatives that could replace 6PPD in tires.

Everyday Actions Matter

- Drive less, carpool, and choose public transportation whenever possible.
- Keep tires inflated to slow wear.
- Regularly sweep your garage and driveways and put contents in the garbage.

For more information, visit streamteam.info/carcare.



Who's "Calling" this Fine Wet Day?

Amphibians of the Northwest Workshop

Explore the ecology of Northwest frog and salamander species with this educational workshop. Guest speaker, Dr. Max Lambert, herpetologist and senior research scientist from Washington State Fish and Wildlife will talk about the habitat requirements, each species unique characteristics, and how water quality impacts from storm water pollution is a threat to amphibian survival.

After the talk, attend the field training to learn how to identify individual egg masses. Suggested Ages 8 and up.

Please register separately for the workshop, field training and amphibian egg mass monitoring dates. Guest habitat biologist Michelle Stevie will lead the field training and surveys. For more information and to register, visit streamteam.info/events.

Egg Mass Identification Field Training

- Sat., Jan. 27, Noon–2 p.m.
Hansen Pond

Amphibian Egg Mass Survey Dates

At Pleasant Glade Pond

- Sat., Feb. 17
- Sat., Mar. 2
- Sat., Mar. 23

Quinone Image Credits: Washington State Department of Ecology



Boldt Decision—Fishing Rights and Salmon Recovery

February 12, 2024, marks the 50th anniversary of the landmark ruling by federal Judge George Boldt in *U.S. v. Washington*. The decision upheld by the Supreme Court secures first people’s tribal treaty rights to hunt, fish, and gather salmon in usual and accustomed places along with the right to 50 percent of the available salmon harvest. But the ruling did more than affirm Indian fishing rights. It upheld tribal treaties as dominant over state law and established treaty tribes as co-managers of salmon fisheries.

The Northwest Indian Fisheries Commission represents the natural resource management interests and concerns of the treaty tribes. Focusing on protecting and restoring salmon habitat, their aim is to reverse decades of bad environmental policy and habitat degradation so salmon can once again thrive!

We asked Kris Peters, Chairman of the Squaxin Island, to reflect on the Boldt Decision. Kris has graciously shared with us the tribe’s connection to the Salish Sea and salmon:

The Squaxin Island Tribe are “The People of the Water” and salmon is our lifeline. The Indigenous Peoples of the Squaxin Tribe have been harvesting salmon for thousands of years; we hold the Salish Sea and the Salmon sacred.

The Medicine Creek Treaty of 1854 between the Squaxin People and the U.S. Federal Government did not grant us the right to fish, instead it affirmed what we always had, our inherent right to fish. Unfortunately, in the 1900’s the State of Washington attempted to take away our right as sovereign nations, breaking the treaties we had made with the U.S. Government.

U.S. v Washington 1974 (Boldt Decision) was a landmark Supreme Court Decision for Northwest Tribes. The Boldt Decision further cemented our inherent right by law and affirmed our sovereignty from the State of Washington. It allowed us to continue what we have been doing since time immemorial, and it brought our Tribal governments to the table in co-management with the State.

We as Squaxin’s will continue to fish in our traditional waters as our ancestors did. We will continue our traditional and cultural ways, with our sovereignty as strong as ever, so future generations can continue our teachings and never forget who they are as sq^waʷsəbš.

Stream Team’s goal is to benefit our community by offering opportunities to learn about and take actions to protect our local waterways. One of the main reasons for this work is to restore salmon habitat and support salmon recovery. Tribal, community, and individual actions are an integral part of protecting and restoring our home waters. When it comes to stormwater pollution prevention, we all have a role to play. Small actions add up and make a difference!

Learn more about keeping our local waterways clean at streamteam.info/actionsforcleanwater.

1850

Donation Land Claim Act allowed white settlers to claim legal title to land. Ignoring a long-standing truth, that Native Americans held legal title to lands they occupied, until they relinquished that title in treaties.

1854

Treaty of Medicine Creek. The Puyallup, Nisqually, Steilacoom, and Squaxin Island tribes enter a treaty with the United States in which, under duress, they cede nearly all their lands, retaining three tiny reservations and access to traditional hunting and fishing grounds.

1940s & 1950s

The state increased the amount of salmon non-Indian people could catch by providing an annual commercial license for \$15 with no daily limit on catch.

1960s

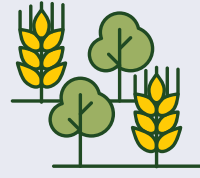
Non-Indian commercial Chinook salmon harvest decreased by over 50% compared to the 1940s fishing harvest. Meanwhile, local law enforcement beat, arrested, and fined local tribal members on multiple occasions for fishing on their treaty lands.

1970

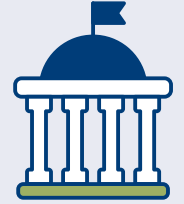
The United States filed United States v. Washington, after Indigenous protests. The U.S. Attorney for the Western District of Washington filed a suit against the state of Washington on behalf of the United States and as trustee for seven tribes.

1974

Judge Boldt found that the Indigenous fishers were entitled to 50% of the harvestable catch.



Comprehensive Plan Updates: What's Your Vision for the Future?



The way we build and develop our communities has a huge impact on our local streams, lakes, and Puget Sound. More hard surfaces from buildings, roads, and parking lots means more rainwater and snowmelt running into nearby storm drains and water bodies, picking up pollutants along the way.

Twenty years from now, Thurston County's population will grow to an estimated 389,700 people. That's a 40 percent increase from 2017. Planning for growth while preserving open green space is a balancing act. Local governments work towards that balance with their Comprehensive Plan, a 20-year strategic vision and policy document for the local jurisdiction.

The state Growth Management Act passed in 1990, requires these plans as well as a thorough update every 8–10 years and regular updates as needed. The cities of Lacey, Olympia, Tumwater, and unincorporated Thurston County are underway in this update process, seeking participation and guidance from the community.

Find Out More

Lacey: cityoflacey.org/comprehensive-planning

Olympia: olympiawa.gov/2045

Tumwater: tinyurl.com/mv6s84j2

Thurston County: Thurston2045.org

What's in the Comprehensive Plan?

- **Future Land Use:** By encouraging smart growth and higher density development, communities can minimize urban sprawl and protect valuable open spaces.
- **Natural Resource Lands:** Plans for agriculture, aquaculture, forestry, and minerals.
- **Housing:** Affordable and diverse housing options are vital for a flourishing community. The plan aims to address housing affordability challenges by supporting the construction of affordable housing units and supporting mixed-use developments.
- **Transportation:** Transportation systems connect communities, provide routes for commerce, and create opportunities for recreation and exercise. The Comprehensive Plan looks at roadway usage and how to mitigate for growing traffic.
- **Capital facilities:** Adequate infrastructure is fundamental for a thriving community. The plan will address the development and maintenance of capital facilities, including utilities, and public services.
- **Economic Development:** Supports sustainable business opportunities; responding to business challenges; and financial incentives, impact fees, and the creation of wealth to benefit community development.
- **Archaeological and Historic Resources:** Promotes and encourages the preservation of archaeological and historic resources.
- **Health:** This chapter addresses how access to healthy food and essential services can improve public health.

What's Changing?

Local governments are required to make updates to ensure they're meeting recent changes to state law. This includes:

- Updating population projections.
- Updating building and housing intensities.
- Updating development regulations.
- Reviewing each chapter to ensure it accommodates for updated projections.
- Planning and accommodating for housing that's affordable for all income levels.
- Considering climate impacts.

3 Ways to Get Involved

1. Learn about your jurisdiction's comprehensive plan and the topics it addresses at the jurisdiction website listed on the left.
2. Request a presentation for your group or organization. Contact the project manager found on the website.
3. Participate in the review process: take a survey, submit a comment, or attend an open house.

Share your vision and plan for the future of your city and county. Get kids involved and have them take the survey– it's their future and their community too!

Stream KIDS' Team CORNER

Read this issue of the Stream Team newsletter and fill in the blanks to solve the crossword puzzle.

DOWN

1. The way we build and develop our _____ has a huge impact on our local streams, lakes, and Puget Sound.
2. Rough-skinned Newts help control _____ populations including mosquitoes.
3. The colder months in the Pacific Northwest are the best time of year to plant many native _____ species.
4. _____ enhance the overall resilience of ecosystems.
5. _____ can be highly competitive and often engage in battles over shelter and food resources.
6. You help prevent water pollution, keeping our lakes and creeks clean, when you _____ a spill!
7. Brewery Park is just one of the many _____ to sleuth your way through! With over 30 locations, Nature Sleuths adventures are practically endless.

ACROSS

1. _____ a.k.a. stream bugs are keystone species, meaning many other animals depend on them for survival.
2. There are truly countless ways in which we all _____ from native plants!
3. As drivers lose tread, those tiny tire particles left along roadways are washed into local _____ when it rains or snows.
4. _____ can be a threat to human health and safety and cause costly damage to our stormwater systems.



DOWN: 1) BEAVERS, 2) PLANT, 3) INSECT, 4) COMMUNITIES, 5) CRAWFISH, 6) REPORT, 7) PARKS, ACROSS: 1) MACROINVERTEBRATES, 2) BENEFIT, 3) STREAMS, 4) SPILLS



Calendar of Events *Winter 2023*

DEC

Allison Springs Bald Eagle Paddle | **Saturday, Dec. 9** | Mud Bay
Register online at apm.activecommunities.com/olyparksartsrec/Activity_Search/10923, course number 11973

JAN

Martin Luther King Jr. Day of Service | **Saturday, Jan. 13** | Squaxin Park | volunteer.olympiawa.gov

Martin Luther King Jr. Day of Service | **Monday, Jan. 15** | City of Lacey Location TBD

Amphibians of the Pacific Northwest Workshop Life History Talk
| **Saturday, Jan. 27, 10–11:30 a.m.** | LOTT WET Science Center

Egg Mass Identification Field Training | **Saturday, Jan. 27, Noon–2 p.m.** | Hansen Elementary

FEB

Amphibian Egg Mass Surveys | **Saturday, Feb. 17** | Pleasant Glade Pond
| **Saturday, Mar. 2** | Pleasant Glade Pond
| **Saturday, Mar. 23** | Pleasant Glade Pond

Scan for complete event info & registration!

Visit StreamTeam.info and click Register



ON THE COVER: Bald Eagle, Kennedy Creek. Photo Credit: Michele Burton

Stream Team Mission

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

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.

Follow Us

- Thurston Stream Team
- [thurston_stream_team](https://www.instagram.com/thurston_stream_team)
- Thurston County Stream Team

Newsletter Contributors

Kelsey Mae Crane, Grant Gilmore, Dakota Gwynn, Susan McCleary, Cynthia Taylor, Sarah Tolle, Miriam Villacian, Alison Brown, and Michele Burton Photographer.

Design & Layout

ASGD Brand Strategy + Design, [AzureSGD.com](https://www.azuresgd.com)



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.

Stream Team Inquiries

hello@streamteam.info

IN LACEY:

Attn: Alison Brown
Tel: 360-486-8707
abrown@ci.lacey.wa.us

IN TUMWATER:

Attn: Grant Gilmore
Tel: 360-754-4140
ggilmore@ci.tumwater.wa.us

IN OLYMPIA:

Attn: Susan McCleary
smccleary@ci.olympia.wa.us

IN THURSTON COUNTY:

Attn: Cynthia Taylor
Tel: 360-754-4013
Cynthia.Taylor@co.thurston.wa.us



EDUCATE • PROTECT • RESTORE



3000 Pacific Ave SE
Olympia, WA 98501
streamteam.info

Preventing Stormwater Pollution—“If You See Something, Say Something!”

Spills can be a threat to human health and safety and cause costly damage to our stormwater systems. While going about our day-to-day lives, we pass through many parts of the community where we might see a spill. It could be an oil slick along the road, mud or debris tracked out from an active construction site, leaking dumpster juice, soapy wash water, restaurant oil, and the list goes on. Sometimes we may see these situations, and not be sure what to do. Who do we call? What do we say? Is it even worth reporting?

When in doubt, just remember “if you see something, say something.” Every time.



Here's why:

Spills can easily move into our stormwater systems (ditches, swales, catch basins, ponds) and drain into our lakes and streams carried by stormwater (rainfall, snow melt), posing risk to human health, aquatic habitat, and wildlife like salmon, Orcas, and amphibians.

If spills reach stormwater systems or surface water, this becomes what is called an “illicit discharge”—an illegal and damaging situation for our community. The goal is to catch spills and clean them up BEFORE they can pollute our lakes, streams, drinking water, and Puget Sound!

Tips for cleaning up small spills around your home:

Small spills of paints, stains, vehicle fluid, and household/yard chemicals can be safely cleaned up by your family at home. Keep a storage bin of kitty litter, paper towels, and heavy-duty garbage bags in your garage for responding to these incidents. Personal protection equipment like rubber gloves can also be helpful.

1. Use sand, kitty litter, and/or paper towels to soak up the spill.
2. Sweep cleanup materials into a heavy-duty garbage bag, tie off, and put in trash.

You help prevent water pollution, keeping our lakes and creeks clean, when you report a spill!

Reporting spills:

1. If it looks hazardous—call 911 immediately!
2. Report the spill to the jurisdiction's spill line if the spill is unmanageable by the responsible party with a potential to enter the right of way. The right of way includes streets, sidewalks, ditches, road shoulders, etc.
3. Include the following: Your contact info, what spilled, how much, and the location. Be specific. Sharing photos is also super helpful!

If you see someone dumping anything into the storm drain, report this right away! Only rain is allowed down the storm drain.

To report spills:

In Lacey: 360-491-5644

Olympia: 360-753-8333

Tumwater: 360-754-4150

Thurston County: 360-867-2099