

## Appendix A

# City of Bothell Surface Water outreach materials distributed in 2018



## Report Spills

See something hazardous heading to the storm drain?

Spills to our roads and storm drains are carried through our stormwater system to local streams. From there, they can cause serious problems for people, pets and the environment. Always call us right away if you see a spill so we can clean it up before it reaches our local streams.

If the spill is a direct hazard to human or environmental health, call 911. Otherwise, call the Spill Hotline as soon as you can.

### What should you report?

A good rule of thumb: if you wouldn't want to swim in it, tell us about it! Let us know if you see these things going into or making their way toward a storm drain:

- car wash water
- vehicle fluids
- dog poop
- construction site debris
- paint
- chemicals of any kind

Learn more about harmful things to look out for at

[www.bothellwa.gov/reportspills](http://www.bothellwa.gov/reportspills)

**Spill Hotline**  
**425-806-6750**

## TABLE OF CONTENTS:

Council Corner.....	2
Recreation Guide .....	4
Enjoy the New Park .....	9
Meet Your City Council .....	16
City Manager's Message.....	18
Benefits of Animal Control Program .....	18
Annual Safe Streets Accountability Report.....	19
Green Living.....	23

## CITY OF BOTHELL - Contact Information

<b>City Hall</b> 18415 - 101st Ave NE .....	M-F, 8 a.m. - 5 p.m.
Reception: .....	425-806-6100
Citizen emergency update hotline:.....	425-806-6109
Community Development: .....	425-806-6400
Parks and Recreation: .....	425-806-6760
Permit Services: .....	425-806-6101
	M-W, F 9 a.m. - 4 p.m., Th 9 a.m. - noon
Public Works: .....	425-806-6800
Spill Hotline.....	425-806-6750
Utility Billing: .....	425-806-6881
<b>Fire &amp; Police Emergencies</b> .....	<b>9-1-1</b> .....24 hours per day
<b>Fire and E.M.S. Department (non-emergency)</b>	
10726 Beardslee Blvd. (Downtown Firehouse) .....	425-806-6242 .....
	M-F, 7 a.m. - 4 p.m.
<b>Municipal Court</b> 10116 NE 183rd .....	425-487-5587 .....
	M-F, 8 a.m. - 5 p.m.
<b>Operations Center</b> 21233 - 20th Ave SE .....	425-488-0118 .....
	M-F, 8 a.m. - 3:30 p.m.
<b>Police Department Lobby Hours</b> 18410 - 101st Ave NE.....	M-F, 7 a.m. - 7 p.m.
<b>Police Department (non-emergency)</b> .....	425-486-1254 .....
	24 hours per day
<b>City of Bothell Website</b> .....	<a href="http://www.bothellwa.gov">www.bothellwa.gov</a>

## Sign up for notifications and alerts!

The City of Bothell website offers dozens of options that you can sign up for to receive specific types of information, from Council meeting agendas, events, news releases, City newsletters, emergency alerts and more. Go to [www.bothellwa.gov](http://www.bothellwa.gov) and select "How Do I" and "Sign Up For" today.



# NATURAL YARD CARE

## *Go all natural!*

Spring is a great time for planting and venturing back into the world of yard care after the cold winter. When picking plants, choose ones that grow well in the Northwest and fit the sun, soil and water conditions in your yard. Washington is lucky to have a number of native plants that are already conditioned to our climate and don't need fertilizers, pesticides or extra water. As an added bonus, native plants also help reduce flooding, control erosion and filter out sediment and pollutants from rainwater before it reaches our local streams.

To see a list of native plants and to learn more about the five steps to a healthy yard, check out [www.naturallyardcare.org](http://www.naturallyardcare.org)



### *Five steps to a healthy yard:*

- 1 Build healthy soil
- 2 Plant right for your site
- 3 Practice smart watering
- 4 Think twice before using pesticides
- 5 Practice natural yard care

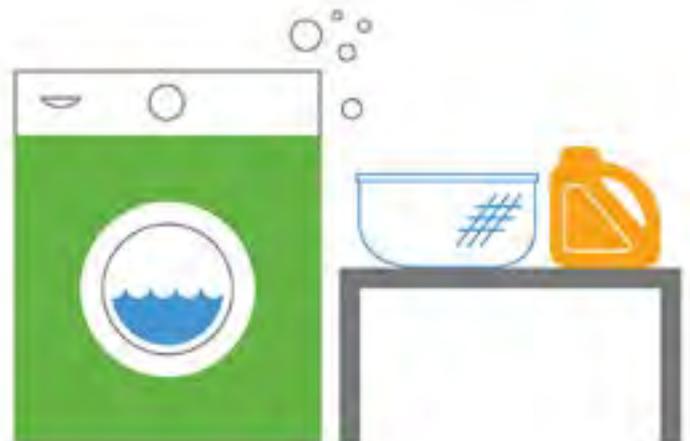
Shop  
Learn  
Recycle

## at The Recology Store!

Stop by The Recology Store Bothell for a FREE **GREEN CLEANING** workshop to learn about how to create your own cleaning supplies! Bring your own reusable bottle or container, and we'll provide castile soap, vinegar and essential oils!

**April 6 from 5p.m. - 7p.m.**

22833 Bothell Everett Hwy  
[recology.com/Bothell](http://recology.com/Bothell)





We are combining Sustainamania and Ecotober into one fantastic event this summer. You will have all the features of both events in one, now at City Hall. This event provides fun activities for all ages to encourage more sustainable practices.

**Date:** August 18

**Time:** 10 a.m. – 2 p.m.

**Location:** City Hall

Accepting vendor and sponsor sign-ups  
[www.bothellwa.gov/sustainamania](http://www.bothellwa.gov/sustainamania)



## RECYCLING EVENT

at the

**Shoreline Recycling & Transfer Station**  
2300 N 165th St., Shoreline, WA 98133

Now through November 30

Cost: **FREE**

Pick up vouchers at The Recology Store  
22833 Bothell Everett Hwy, #111, Bothell

Bothell residents are eligible to receive two vouchers per year while supplies last. More details:

[www.bothellwa.gov/recycleevent](http://www.bothellwa.gov/recycleevent)

This program is for residential customers only.

For questions about items accepted at the Transfer Station, call 206-477-4466.



## Time for Spring Cleaning

Does your garage look anything like this?



If it does, there's no time like the present to tackle the mess! If you find any hazardous chemicals while you're at it – like fertilizers, pesticides, cleaning supplies or automotive chemicals – decide whether you really need to keep them. You can often find more natural ways to care for your yard, home and vehicles. But if you do need to keep them, be sure to handle and store them properly.

### Storing hazardous products

- Keep hazardous materials away from other products
- Label them clearly and keep them in their original containers
- Make sure they are at least four feet off the floor and out of the reach of children or pets
- Cover them completely

To find out whether a product is hazardous, visit [www.hazwastehelp.org](http://www.hazwastehelp.org) and type “product list” in the search box.

If you are ready to get rid of any hazardous products, learn how to do it safely and correctly.

### Getting rid of hazardous products

- Don't throw them in the garbage
- Find out if you can recycle them curbside
- Bring them to the Wastemobile
- Take them to your county's drive-up household hazardous waste facility

Learn more about your disposal options at [www.hazwastehelp.org](http://www.hazwastehelp.org)

## Puget Sound Starts Here Month

### Are you up for the challenge?

The City of Bothell is working with hundreds of organizations across Puget Sound to challenge you during this May's Puget Sound Starts Here Month. We encourage you to do at least one action that helps keep the Puget Sound healthy.

### A few ideas to try

- Take your car to a commercial car wash instead of washing it in your driveway
- Pick up your pet's waste and put it in the garbage
- Take care of your yard naturally by using compost and mulch
- Don't drip and drive – fix auto leaks right away
- Take your hazardous materials to the Wastemobile
- Don't use plastic straws
- Make sure your septic system or side sewer are in good working order
- Use native plants and trees in your yard to soak up rainwater and limit runoff

### About Puget Sound Starts Here

Puget Sound Starts Here is made up of more than 750 organizations working together to raise awareness about how our everyday actions affect Puget Sound.

When it rains, water flows over hard surfaces like roofs, parking lots, driveways, streets, and lawns where the soil has been packed down. As rainwater flows towards ditches and storm drains, it picks up dog poop, lawn chemicals like fertilizer and pesticides, motor vehicle oil, and many other pollutants.

Do you know where that polluted rainwater goes next? Right into our local streams, lakes and wetlands that eventually empty into the Puget Sound. Your actions have an impact – it's your choice whether to make it a negative or a positive one.

Find more ideas to try and ways to get involved at [www.pugetsoundstartshere.org](http://www.pugetsoundstartshere.org)



**Puget Sound**   
**Starts Here**



### Change your clock, change your smoke detector batteries

It's that time of year again! When our clocks spring forward on March 11, it's also time to change the batteries in your smoke alarms and carbon monoxide detectors. Changing the batteries in your home safety monitors is one of the easiest and most effective ways to reduce risk of injury from a fire or carbon monoxide.

A working smoke alarm gives you and your family critical seconds to escape when every single moment counts. For help making your own home fire escape plan, visit [www.bothellwa.gov/2waysout](http://www.bothellwa.gov/2waysout)



# water

## EDUCATION

The [City of Bothell](#) offers several fun, hands-on classroom presentations to help our students explore the fascinating world of water. All activities are tailored to our region and are offered **FREE** of charge to our schools. An experienced educator from **Nature Vision, Inc.** will conduct each class.

**Nature Vision** is an award-winning environmental education non-profit organization serving over 65,000 students in our region annually. They foster appreciation and stewardship of our environment by educating and connecting community to the world around us.

### programs OFFERED

#### Water Cycle Terrariums (K-3)

Learn the steps of the water cycle, and become a water droplet for an hour. Travel to all the places water goes to during the water cycle, including lakes, rivers, streams, mountains, the ocean, plants, animals and you! Understand simple ways to protect and care for water.

#### Water Cycle Round (4-6)

Students will review the stages of the water cycle and play the role of a water drop as it travels through the cycle. Discussion will include the function of watersheds and our local water supply and how to protect water.

#### Salmon Cycle (K-6)

Discover the connection between Pacific salmon, people, and the water we share. The salmon life cycle and what this keystone species requires from its ecosystem is discussed. Students will explore water quality issues and understand why healthy salmon habitat is good for Northwest ecosystems, and people too.

#### Watershed Ecosystems (K-6)

We all live in a watershed, and it is up to us to keep the water that flows through it clean and plentiful. This program introduces students to their own local watershed and to the plants and animals that share this important ecosystem. Students will also learn how a healthy environment cleans water naturally, and gain insight on the impact of humans on this system. Positive human actions on the combined natural-and human built environments are discussed.

#### Wetland Filters (2-6)

Wetlands are like the kidneys of the earth, filtering water as it circulates through the water cycle. Students will learn how wetlands perform this important function through hands-on activities.

### Get Started!

# FREE

To schedule a program, please [contact Nature Vision](#) at [info@naturevision.org](mailto:info@naturevision.org) or call 425-836-2697



If you have any questions regarding programs or other services offered, please [contact your Surface Water Program Coordinator, Christi Cox](#) at 425-806-6790 or [christi.cox@bothellwa.gov](mailto:christi.cox@bothellwa.gov)

### Additional Resources

#### [PugetSoundStartsHere.org](http://PugetSoundStartsHere.org)

Learn how you can help heal Puget Sound.

#### [KingCounty.gov/Salmon](http://KingCounty.gov/Salmon)

Find additional salmon information online.

#### [Drain Rangers Curriculum](http://DrainRangersCurriculum)

[pugetsoundstartshere.org/drain-rangers](http://pugetsoundstartshere.org/drain-rangers)

## Watershed Dynamics (Enviroscape) (3-6)

Students will interact with a tabletop model of a typical community to learn how their everyday choices affect the water quality in our watershed. Alternative choices to prevent watershed contamination are discussed.

## Water Supply (4-6)

Do you know where your drinking water comes from? Discover the path clean water takes from its local natural source to your faucet! Students will explore the human and natural factors that affect our water supply, and what actions they can take to keep this important natural resource pristine as our population grows.

## Water Conservation (4-6)

Did you know that our area receives less rainfall in the summer months than Miami, Florida? Join us for an interactive lesson that will explore what our community can do to conserve our water indoors and outdoors. Students will learn why we need to save water and what every person can do to use water wisely to help keep more water in our local water bodies for wildlife and future generations.

## Water Connection Field Trip (K-6)

Students will visit a local lake, wetland, or pond near their school and explore it with a naturalist. Students will observe plants and animals in this environment, examine and identify local freshwater invertebrates, and will learn about the health of our greater watershed systems. Older students may also participate in water quality tests for oxygen, pH, temperature and more.

## Healthy Water, Healthy Soil (K-3)

Dig in to healthy soil and discover the living creatures that benefit the soil and plants all around us. Touch and feel the non-living parts of soil, and explore how healthy water keeps our soils in the Northwest healthy.

## Healthy Water, Healthy Soil (4-6)

Dig in to healthy soil and discover the living network of decomposers that benefit the ecosystems around us. Explore how healthy water keeps our Northwest soils healthy and understand how humans can impact soil through our interactions with water.

## Blue Teams (K-6)

You have the opportunity to create a youth-powered Blue Team to help care for one of our most precious natural resources -WATER! Blue Teams carry out a water quality action project that promotes watershed sustainability and stewardship in their community. Each team receives expert help from a Naturalist to help plan, prepare and execute their project.

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## GET STARTED!

To schedule programs or field trips, visit <http://www.naturevision.org/program-registration/>. Register online or print out the registration form and fax it in per the instructions.

Scheduling considerations: We are available to visit your school from 7:30 a.m. - 3:30 p.m. Please allow one hour for each elementary program, 45-50 minutes for each secondary program. Feel free to schedule programs back-to-back (10:00, 11:00, 12:00), but if possible please leave 10 -15 minutes in between. Pre-registration is required. If you have any questions about these programs please do not hesitate to email Nature Vision at [info@naturevision.org](mailto:info@naturevision.org), or call 425-836-2697.

## DRAIN RANGER CURRICULUM

The Pacific Education Institute with formal educators, cities, and nonprofits across the region worked to create an excellent stormwater curriculum with locally relevant videos, illustrations, and content. Please review the curriculum and complete the online form if you are interested in receiving free materials, training, or classroom assistance to implement these great lessons in your classroom: [www.bothellwa.gov/DrainRangers](http://www.bothellwa.gov/DrainRangers)



# water

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### programs OFFERED

#### **Watershed Dynamics (Enviroscape) (7-12)**

Students will interact with a tabletop model of a typical community to learn how their everyday choices affect the water quality in our watershed. Alternative choices to prevent watershed contamination are discussed.

#### **Water Conservation (7-9)**

Did you know that our area receives less rainfall in the summer months than Miami, Florida? Join us for an interactive lesson that will explore what our community can do to conserve our water indoors and outdoors. Students will learn why we need to save water and what every person can do to use water wisely to help keep more water in our local water bodies for wildlife and future generations.

#### **Water Supply (7-9)**

Do you know where your drinking water comes from? Discover the path clean water takes from its local natural source to your faucet! Students will explore the human and natural factors that affect our water supply, and what actions they can take to keep this important natural resource pristine as our population grows.

#### **Watershed Ecosystems (7-8)**

We all live in a watershed, and it is up to us to keep the water that flows through it clean and plentiful. This program introduces students to their own local watershed and to the plants and animals that share this important ecosystem. Students will also learn how a healthy environment cleans water naturally, and gain insight on the impact of humans on this system. Positive human actions on the combined natural-and human built environments are discussed.

#### **Salmon Cycle (7-12)**

Discover the connection between Pacific salmon, people, and the water we share. The salmon life cycle and what this keystone species requires from its ecosystem is discussed. Students will explore water quality issues and understand why healthy salmon habitat is good for Northwest ecosystems, and people too.

### Get Started!

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### \*Healthy Water, Healthy Soil (7-8)

Through this hands-on lesson, students will gain an understanding of soil function and physical properties. Students will observe soil texture, structure, color, infiltration, test for key nutrients, and analyze soil pollution. Students will connect soil composition with the impact of our daily water choices on the natural environment.

### \*Healthy Water, Healthy Ecosystems (9-12)

Experiment with soils from different watershed ecosystems in Washington, and develop an understanding of what each ecosystem needs to be healthy and sustainable. Conduct an analysis of plant needs and create a restoration plan that matches an appropriate soil within an ecosystem. Determine how soil pollution creates disruptions within these ecosystems. *\*Please note Healthy Water, Healthy Soil and Healthy Water, Healthy Ecosystems are two part programs for grades 7-12. Please allow for two 50 minute sessions or one block period for each program.*

### Water Connection Field Trip (7-12)

Students will visit a local lake, wetland, or pond near their school and explore it with a naturalist. Students will observe plants and animals in this environment, examine and identify local freshwater invertebrates, and will learn about the health of our greater watershed systems. Older students may also participate in water quality tests for oxygen, pH, temperature and more.

### Be the Solution (Grades 7-8)

Students will become familiar with their watershed by gaining awareness of current water issues and understanding what community members can do to help. They will apply their new understanding by interpreting real-world local data.

### Be the Solution (Grades 9-12)

Students will use a detailed map of Bothell's subwatersheds to see firsthand how waterways are connected. They will also understand the human impacts on their watersheds. Students will interpret data collected in order to gain an understanding of local issues affecting waterways, and become familiar with best management practices that have a positive impact on the watershed ecosystem.

### Be the Solution (Grades 11-12)

Students will become knowledgeable in the many issues facing Puget Sound's present health. They will understand the important role we all play in recovering Puget Sound by becoming familiar with what daily actions Bothell community members can take to create more positive impacts in our watersheds. As a class, students will make clear the many facets affecting Puget Sound by interpreting the most recent State of the Sound report.

### Blue Teams (Grades 6-12)

You have the opportunity to create a youth-powered Blue Team to help care for one of our most precious natural resources -WATER! Blue Teams carry out a water quality action project that promotes watershed sustainability and stewardship in their community. Each team receives expert help from a Naturalist to help plan, prepare and execute their project.

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## GET STARTED!

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## DRAIN RANGER CURRICULUM

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### **The Drain Ranger Pledge**

**I will do my duty as a Drain Ranger to guard Puget Sound,  
to protect all aquatic animals large and small,  
to prevent pollution from going down storm drains  
into lakes, rivers, streams, and Puget Sound.**

**I will explain to others that carwash soap, dog poop  
and chemical fertilizers can end up in storm drains.**

**I will help my family and friends stop polluting by showing them  
the Puget Sound Starts Here website to find a better way.**

**I promise this on my honor as a Drain Ranger.**

**This document certifies that**

---

**is an official**

**DRAIN RANGER**

**Protector of Puget Sound**



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Chief Drain Ranger

Date

# Storm drains flow **TO OUR WATERWAYS** **WITHOUT TREATMENT**

The Washington State Department of Ecology estimates that each year **millions of pounds** of toxic pollutants flow into our streams, our lakes, our rivers, and then into Puget Sound.

Rainwater that runs off paved roads and driveways, rooftops, yards, and other developed land is a major source of this pollution.



## Simple ways you can help

You can leave a legacy of clean, healthy water for the next generation

### Vehicles

Use a commercial car wash and fix auto leaks right away



### Pets

Scoop the poop, bag it, and toss it in the trash, *not* in the yard waste bin

### Yards

Use pesticides sparingly, if at all, and use compost instead of fertilizer

### Homes

Use nontoxic cleaners in and around your home, and don't stockpile toxic chemicals

Our streams are in trouble.

Puget Sound is in trouble.

We are the solution, and we can do something about it!

## LEARN MORE

[pugetsoundstartshere.org](http://pugetsoundstartshere.org)

More ways you can help Puget Sound

[bothellwa.gov/drainrangers](http://bothellwa.gov/drainrangers)

Stormwater activities to try at home

Stormwater education presentations are brought to your child's classroom by



# Drain Rangers

## Stormwater curriculum

The Pacific Education Institute along with formal educators, cities, and nonprofits throughout Washington worked together to create an excellent stormwater curriculum that meets next generation standards. It incorporates locally relevant videos, illustrations, content, and mapping. You can get all of these materials **FREE** on our [Puget Sound Starts Here](#) website.

Below are some stormwater experiments students can try at home.



### Build a Watershed Model

This simple but fascinating activity involves water, markers, and a spray bottle. Learn how a watershed functions and how it's affected by everything surrounding it.



### Calculate Your Stormwater Runoff

Students can try this at-home activity to learn more about stormwater and calculate your annual stormwater runoff.



### Explore the Surface

Here's an easy experiment students can do to help understand the difference between permeable and impervious surfaces.



### Sink or Swim

This activity helps demonstrate what happens when detergents and other kinds of soap get into our streams.



## Documents

- [Parents' Flyer \(PDF\)](#)

**Interested in bringing  
Drain Rangers  
curriculum to your  
school?**

## Contact us

**Christi Cox**

Surface Water Program

Coordinator

Select Language ▼

[Email](#)

Powered by [Google Translate](#)

## Drain Rangers Videos

Check out this creative video about engineering solutions for dirty stormwater runoff. It's so good, it won an award for best STEAM entry at the 2018 New Media Film Festival in Los Angeles, CA! This is an annual event that "celebrates the interactivity of new technologies and formats for media and cinema with global consciousness."

### Video Four - Dirty Stormwater Runoff: Advanced Engineerin...



### Watch more!

You can watch the whole series of our latest [Drain Rangers videos](#) created by [Transect Films](#).

# Watersheds

## What is a watershed?

A **watershed** is the entire land area from which water drains into a particular surface water body such as a lake, stream, or river.

## Do *you* live in a watershed?

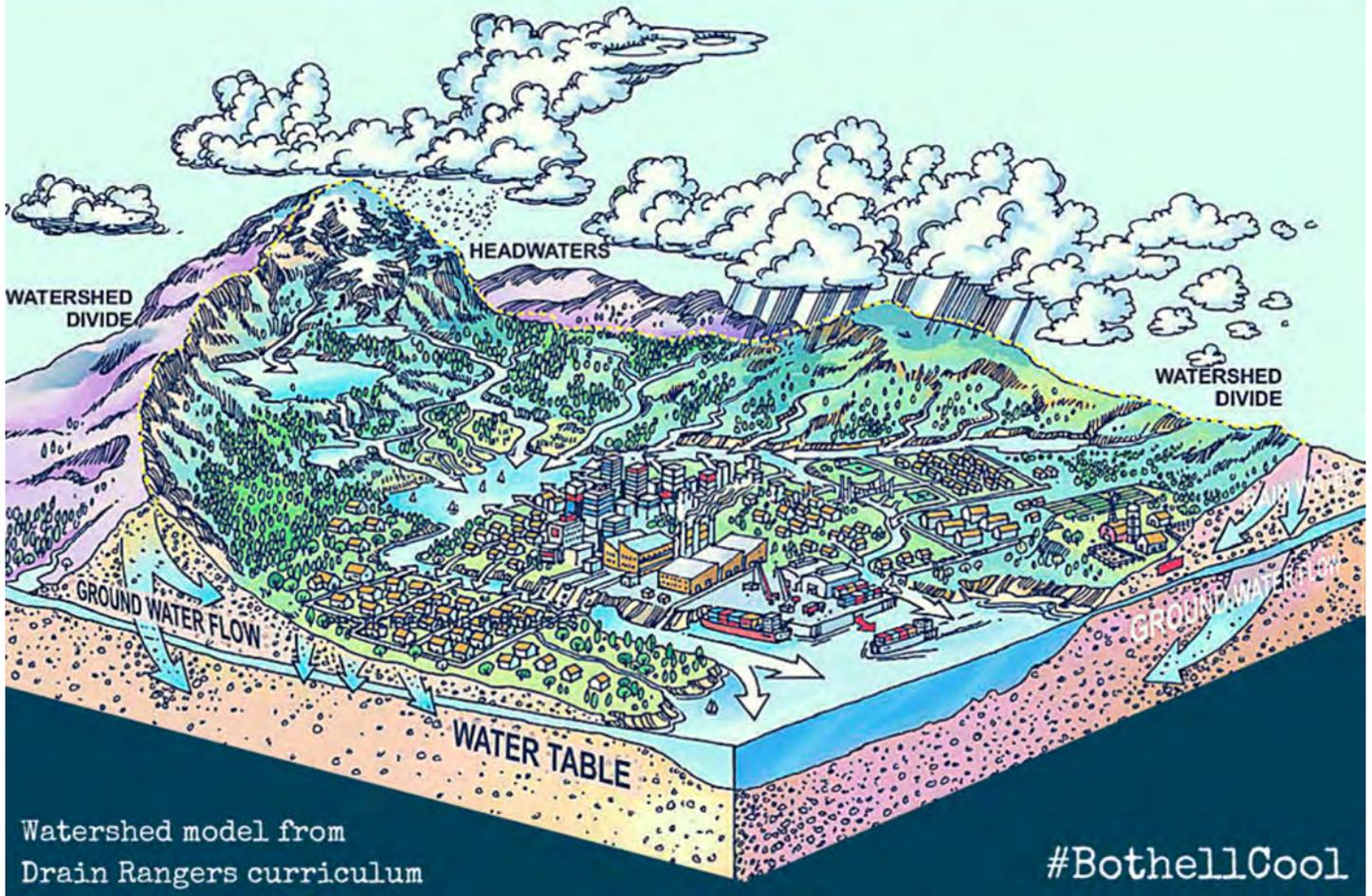
Trick question. We all live in a watershed. No matter where you live, you live in a watershed. That's because everywhere rain falls or water flows over the land is part of a watershed. Watersheds can be big or small. Bothell is split into two major watersheds and a number of sub-basins: The [Sammamish Watershed](#) covers the majority of the city, and the [Lake Washington/Cedar River Watershed](#) covers the southernmost parts of the city.

Watershed boundaries are defined by the elevation of the land, with the highest elevation points, "ridges," marking the boundary of a watershed. These ridges are also called, "divides." The Continental Divide of the U.S. for example, is in the Rocky Mountains. All the rain and snow falling on the west side of the divide flows into the Pacific Ocean. All the rain and snow falling on the east side of the divide, sooner or later, ends up in the Atlantic Ocean. All water is connected. [Simple choices in our daily activities](#) affect the quality of water that we drink and the water that fish and other wildlife rely on.

Learn about [salmon habitat conservation efforts](#) in our watersheds.

## Watershed Model from Drain Rangers Curriculum

# HOW WATERSHEDS WORK



## Water cycle

Excerpt from [King County's website](#)

"In a watershed, the rain, the rivers, the lakes and wetlands, even our drinking water are all parts of an intricate cycle. Rain falling on the land soaks into the earth; some runs off to streams; some evaporates before it reaches the earth. The water that soaks into the ground becomes part of the groundwater and feeds streams and wetlands and supplies much of our drinking water. Surface runoff forms streams, then rivers that eventually empty into Puget Sound. Rivers are the sign that the cycle is working...returning water to the oceans where it evaporates, forms clouds, and falls again."

***We all live downstream.***

## Learn more

### Which watershed do we live in?

Not only does Bothell cover two counties, but we also cover two major watersheds: the Sammamish Watershed and the Cedar River/Lake Washington Watershed.

- [Sammamish Watershed map](#)
- [Cedar River/Lake Washington Watershed map](#)

Select Language ▼

Powered by [Google Translate](#)

We also have a number of watershed sub-basins in Bothell:

- North Creek
- Swamp Creek
- Little Bear Creek
- Horse Creek
- Juanita Creek

## More maps

- [Bothell creek map \(PDF\)](#)
- [Bothell impervious surfaces in King County \(PDF\)](#)
- [Bothell watershed and creek map \(PDF\)](#)
- [Bothell watersheds map \(PDF\)](#)

## Learn the lingo

### Watershed words

**Headwaters:** Source of a stream.

**Watershed:** The land from which rain collects and runs to a single point.

**Groundwater:** Water that lies beneath the earth's surface.

**Stormwater:** Water that rains that watershed into streams, rivers, lakes, and Puget Sound.

**Infiltration:** The slow movement of water from the surface to the groundwater.

**Hydrologic:** Related to water in all its forms.

**Aquifer:** An underground water supply flowing through sand and gravel.

**Nature Vision  
Schools by Agency**

Schedule Date: From Jan 1, 2018 to Jun 30, 2018;  
Sponsor = City of Bothell - KCD

**Maywood Hills Elementary**

*Sponsored by:* City of Bothell - KCD

<i>Teacher</i>	<i>Grade</i>	<i>Program</i>	<i># Class</i>	<i>Date</i>	<i>Invoice#</i>
Sarah Adkinson	1	Watershed Ecosystem	22	29-Mar-18	6549
Katie Andrews	1	Watershed Ecosystem	22	29-Mar-18	6549
Janet Hudson	1	Watershed Ecosystem	23	30-Mar-18	6549
Karly Gnoinsky	1	Watershed Ecosystem	22	30-Mar-18	6549
Maxine Miceli	1	Watershed Ecosystem	22	30-Mar-18	6549

Total # of Programs for School = 5

Total # of Students = 111

**Westhill Elementary**

*Sponsored by:* City of Bothell - KCD

<i>Teacher</i>	<i>Grade</i>	<i>Program</i>	<i># Class</i>	<i>Date</i>	<i>Invoice#</i>
Ashley Amundsen	2	Water Cycle Terrariums	23	05-Feb-18	6515
Sherry Yuhan	2	Water Cycle Terrariums	23	05-Feb-18	6515
Reesa Olivares	2	Water Cycle Terrariums	23	05-Feb-18	6515
Noelle Orkney	K	Watershed Ecosystem	20	23-Apr-18	
Emily Mickelberry	K	Watershed Ecosystem	20	23-Apr-18	
Kathleen McGuinness	K	Watershed Ecosystem	20	23-Apr-18	
Kelly Grindley	K	Watershed Ecosystem	20	23-Apr-18	
Maureen Baris	1	Water Cycle Terrariums	21	10-May-18	
Lisa Basher	1	Water Cycle Terrariums	21	10-May-18	
Caitlin Doyle	1	Water Cycle Terrariums	21	10-May-18	
Keyna Shumaker	1	Water Cycle Terrariums	21	10-May-18	

Total # of Programs for School = 11

Total # of Students = 233

**Woodin Elementary**

*Sponsored by:* City of Bothell - KCD

<i>Teacher</i>	<i>Grade</i>	<i>Program</i>	<i># Class</i>	<i>Date</i>	<i>Invoice#</i>
Kirsten Jackson	3	Salmon Cycles	23	04-Jan-18	6497
Michelle Steele	3	Salmon Cycles	23	04-Jan-18	6497
Christine Ro	3	Salmon Cycles	23	04-Jan-18	6497
Christine Ro	3	Water Cycle Terrariums	23	25-Jan-18	6497
Michelle Steele	3	Water Cycle Terrariums	23	25-Jan-18	6497
Kirsten Jackson	3	Water Cycle Terrariums	23	25-Jan-18	6497
Felicia Ajer	1	Water Cycle Terrariums	30	13-Mar-18	6549

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**Woodin Elementary***Sponsored by: City of Bothell - KCD*

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<i>Teacher</i>	<i>Grade</i>	<i>Program</i>	<i># Class</i>	<i>Date</i>	<i>Invoice#</i>
Rachel Hoover	1	Water Cycle Terrariums	30	13-Mar-18	6549
Andrea Algiers	1	Water Cycle Terrariums	30	13-Mar-18	6549

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Total # of Programs for School = 9

Total # of Students = 228

Total # of Sponsored Programs = 25

Total # of Students = 572

**Nature Vision  
Schools by Agency**

Schedule Date: From Jan 1, 2018 to Jun 30, 2018;

Sponsor = City of Bothell - Sno

**Crystal Springs Elementary**

*Sponsored by:* City of Bothell - Sno

<i>Teacher</i>	<i>Grade</i>	<i>Program</i>	<i># Class</i>	<i>Date</i>	<i>Invoice#</i>
Tammy Fassett	2	Water Cycle Terrariums	25	22-Mar-18	6550
Todd Parker	2	Water Cycle Terrariums	25	22-Mar-18	6550
Kimberly Rhoades	2	Water Cycle Terrariums	25	22-Mar-18	6550
Ms. Williams	2	Water Cycle Terrariums	25	22-Mar-18	6550
Shelby Hemp	K	Water Cycle Terrariums	19	26-Apr-18	
Shui Li-Green	K	Water Cycle Terrariums	19	26-Apr-18	
Rebecca Sharp	K	Water Cycle Terrariums	19	26-Apr-18	
Jennifer Murphy	K	Water Cycle Terrariums	19	26-Apr-18	
Leinani Manabat	K	Water Cycle Terrariums	19	26-Apr-18	
Lydia Voss	K	Water Cycle Terrariums	19	26-Apr-18	

Total # of Programs for School = 10

Total # of Students = 214

**Shelton View Elementary**

*Sponsored by:* City of Bothell - Sno

<i>Teacher</i>	<i>Grade</i>	<i>Program</i>	<i># Class</i>	<i>Date</i>	<i>Invoice#</i>
Lynn Anderson	4	Water Cycles Round	20	04-Jun-18	
Tory Nelson	4	Water Cycles Round	20	04-Jun-18	
Laurie Walloch	4	Water Cycles Round	20	04-Jun-18	
Jan Clements	4	Water Cycles Round	20	04-Jun-18	
Jan Clements	4	Water Conservation	20	07-Jun-18	
Laurie Walloch	4	Water Conservation	20	07-Jun-18	
Tory Nelson	4	Water Conservation	20	07-Jun-18	
Lynn Anderson	4	Water Conservation	20	07-Jun-18	

Total # of Programs for School = 8

Total # of Students = 160

**Skyview Middle**

*Sponsored by:* City of Bothell - Sno

<i>Teacher</i>	<i>Grade</i>	<i>Program</i>	<i># Class</i>	<i>Date</i>	<i>Invoice#</i>
Lorie Hardwick	6	Watershed Ecosystem	30	07-May-18	
Lorie Hardwick	6	Watershed Ecosystem	30	07-May-18	
Lorie Hardwick	6	Watershed Ecosystem	30	07-May-18	
Rebecca Kull	6	Watershed Ecosystem	30	08-May-18	
Rebecca Kull	6	Watershed Ecosystem	30	08-May-18	

**Skyview Middle**

*Sponsored by:* City of Bothell - Sno

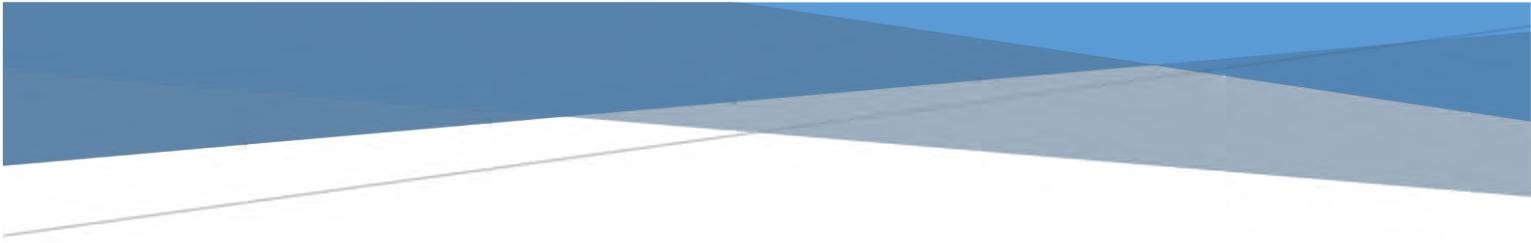
<i>Teacher</i>	<i>Grade</i>	<i>Program</i>	<i># Class</i>	<i>Date</i>	<i>Invoice#</i>
Jon Bahr	6	Watershed Ecosystem	30	08-May-18	

Total # of Programs for School = 6

Total # of Students = 180

Total # of Sponsored Programs  
554

24 Total # of Students =



2018

City of Bothell's  
Water Education Programs

Final Evaluation Results

December 31, 2018

Prepared for



Surface Water Division  
18415 101st Avenue NE  
Bothell, WA 98011

Prepared by



Brightwater Center  
22505 State Route 9 SE  
Woodinville, WA 98072

# ***Final Evaluation Results for the City of Bothell Water Quality Education Programs 2018***

## **Description and Purpose**

The City of Bothell's Water Quality Education Program continues to educate students about pollution prevention, stormwater quality, and watershed ecosystem health. Students that participate in these workshops learn how natural water systems keep our water healthy, how human built water systems interact with these natural systems, and what we can all do to be good stewards of our watershed. This program is helping to create awareness and foster sustainable practices and behaviors in the City of Bothell.

This report presents the results from the ninth year of evaluating these programs.

## **Evaluation Goals and Methods**

The evaluation was designed to measure:

**Goal 1: Student Retention:** To evaluate the retention of lessons in short-term and long-term student memory (short term immediately following the lessons, long term after 60 days). We made the change to 60 day surveys from 90 day as we have found teachers are more likely to return long term surveys on this schedule.

Method 1- select classroom surveys

- Method 2- follow-up surveys after 60 days when applicable
- Method 3- student letter analysis
- Method 4- select student responses to essay questions

**Goal 2: Teacher Satisfaction:** To evaluate how the program is received by teachers, i.e. are the workshops helping teachers meet state and local education standards and therefore desired by teachers as a teaching resource.

- Method 5- post workshop email survey

**Goal 3: Agency Goals Met:** To evaluate how we can more directly meet agency goals within NPDES permit and budget parameters.

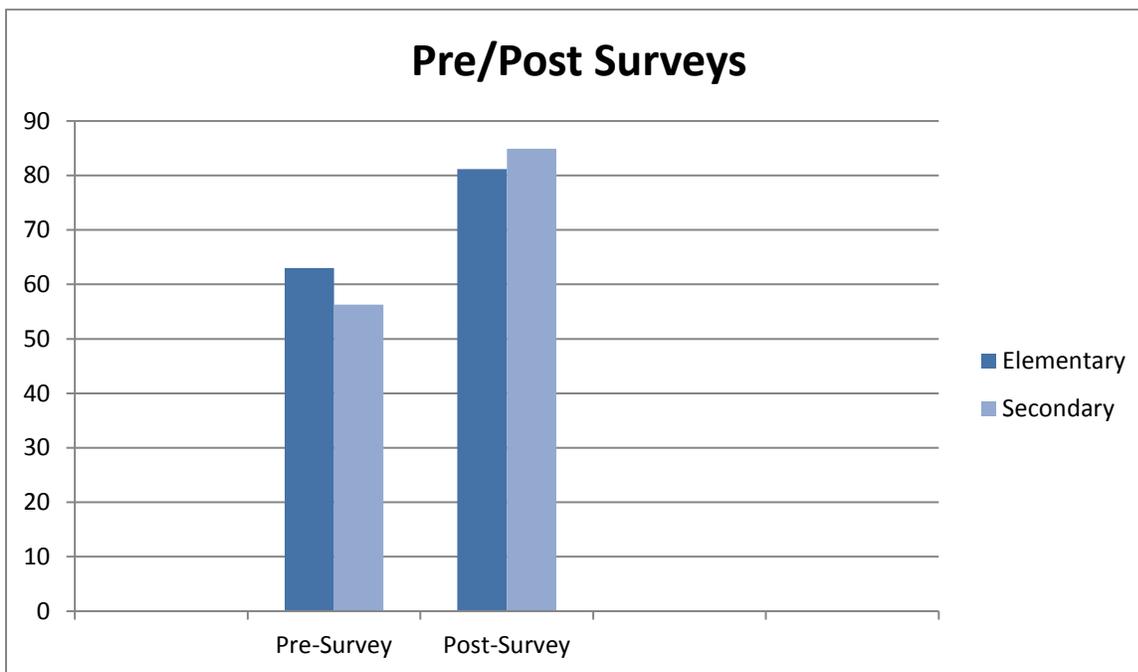
- Method 6- classroom observations (done by City of Bothell, not included in this report)

## **Results**

**The 5 question classroom evaluation surveys** given before and after each workshop show significant short-term retention of key facts by students at the elementary school level. Significant is defined as a 10 point or greater spread between pre and post-surveys. Four

elementary level classes of students participated in the surveys. The survey results showed that the 65 students that participated had an average score of 63% on the survey prior to the workshop (pre-survey). The 65 students that participated in the post-survey had an average score of 81.2% immediately following the workshop. The classes took place too late in the school year for 60 day surveys to be possible.

**The 5 question classroom evaluation surveys** given before and after each workshop show significant short-term retention of key facts by students at the secondary school level as well. Six secondary level classes of students participated in the surveys. The survey results showed that the 165 students that participated had an average score of 56.3% on the survey prior to the workshop (pre-survey). The 165 students that participated in the post-survey had an average score of 84.9% immediately following the workshop. The classes took place too late in the school year for 60 day surveys to be possible.



No letters containing content were sent in during the survey period, despite leaving prompts and postage paid envelopes at schools, and reminding teachers via email. Teachers again indicated that they did not have time for letters due to prolonged testing periods in schools this spring. Some letters sent in were meant as simple thank you letters and delivered to the City of Bothell.

### Select student responses to questions

Further examination of specific survey questions yielded significant results as well. These results are presented below. For fill-in questions, results were compiled by the number of students that responded the same way. For example, if a student response to *How can we help*

*keep water in our rivers, lakes, streams and the Puget Sound healthy?* is *Pick up after your dog* 10 students, that means that 10 students responded to this question in the same way in the class or combined classes. Many students list multiple options on fill-in questions. We only compile the answers to the fill in questions on post-surveys, as pre-survey fill in questions have little to no information from students.

### **Water Cycles Round**

- Water Cycles Round - Bothell – 4 June 2018 - Shelton View - Anderson  
Question #5: List 3 ways you can keep water in our rivers, lakes, streams and Puget Sound healthy.  
*Post-Survey:*
  - Do not pollute / 5 students
  - Pick up trash / 6 students
  - Do not litter / 10 students
  - Pick up pet waste / 6 students
  - Teach people not to litter / 5 students
  - Don't use oil near water / 2 students
  
- Water Cycles Round - Bothell – 4 June 2018 - Shelton View - Clements  
Question #5: List 3 ways you can keep water in our rivers, lakes, streams and Puget Sound healthy.  
*Post-Survey:*
  - Do not litter / 11 students
  - Do not pollute / 6 students
  - Do not let oil leak / 3 students
  - Pick up pet waste / 6 students
  - Use cars less / 1 student
  - Pick up trash / 1 student
  
- Water Cycles Round - Bothell – 4 June 2018 - Shelton View - Nelson  
Question #5: List 3 ways you can keep water in our rivers, lakes, streams and Puget Sound healthy.  
*Post-Survey:*
  - Do not litter / 10 students
  - Pick up pet waste / 3 students
  - Stop polluting / 2 students
  - Do not dump chemicals / 2 students
  - Picking up trash / 2 students
  - Properly wash car / 1 student
  - Keep storm water clean / 1 student
  
- Water Cycles Round - Bothell – 4 June 2018 - Shelton View - Walloch  
Question #5: List 3 ways you can keep water in our rivers, lakes, streams and Puget Sound healthy.  
*Post-Survey:*
  - Properly wash car / 2 students
  - Stop polluting / 4 students
  - Recycle / 2 students
  - Check car for leaks/ 2 students
  - Don't litter / 13 students

- Pick up trash / 6 students
- Don't release balloons / 1 student
- Keep hair out of the drain / 1 student
- Pick up pet waste / 1 student
- Don't put anything down storm drain / 2 students

### **Watershed Ecosystems**

- Watershed Ecosystems - Bothell – 7 May 2018 – Skyview - Bahr  
Question #5: List 5 ways you can keep water in our rivers, lakes, streams and Puget Sound healthy.

#### *Post-Survey:*

- Keep storm drains clean / 9 students
  - Don't put paint in sink / 1 student
  - Use water in moderation / 2 students
  - Do not pollute/litter / 26 students
  - Educate others on Pollution / 2 students
  - Research Pollution/ 1 student
  - Carpool, bus, bike, walk, etc. Instead of cars/ 1 student
  - Pick up dog poop / 18 students
  - Put cigarettes in right disposal / 20 students
  - Clean oil spills / 4 students
  - Use Compost and not Fertilizers / 1 student
  - Don't use pesticides / 3 students
  - Put out more trash cans on street/ 1 student
  - Use Carwash / 16 students
  - Reusable bags/containers / 11 students
- Watershed Ecosystems - Bothell – 7 May 2018 – Skyview - Hardwick 1  
Question #5: List 5 ways you can keep water in our rivers, lakes, streams and Puget Sound healthy.

#### *Post-Survey:*

- Keep storm drains clean / 15 Students
- Keep oil/soap out of water / 15 students
- Use water in moderation / 11 students
- Do not pollute/litter / 26 students
- Don't let the faucet run / 4 students
- Fix leaks / 2 students
- Recycle / 11 students
- Educate others on Pollution / 1 student
- Research Pollution/ 3 students

- Watershed Ecosystems - Bothell – 7 May 2018 – Skyview - Hardwick 2  
Question #5: List 5 ways you can keep water in our rivers, lakes, streams and Puget Sound healthy.

#### *Post-Survey:*

- Keep storm drains clean / 3 students
- Use water in moderation / 4 students
- Do not pollute/litter / 24 students
- Educate others on Pollution / 9 students
- Research Pollution/ 2 students
- Carpool, bus, bike, walk, etc. Instead of cars/ 11 students

- Pick up dog/animal waste / 3 students
  - Electric car / 2 students
  - Clean oil spills / 4 students
  - Don't use pesticides / 3 students
  - Make rain gardens / 1 student
  - Plant more trees / 11 students
  - Stop building factories / 2 students
  - Keeping trash out of the toilet / 1 student
- Watershed Ecosystems - Bothell – 7 May 2018 – Skyview - Hardwick 3  
Question #5: List 5 ways you can keep water in our rivers, lakes, streams and Puget Sound healthy.  
*Post-Survey:*
    - Use water in moderation / 6 students
    - Do not pollute/litter / 26 students
    - Don't let the faucet run / 4 students
    - Recycle / 6 students
    - Educate others on Pollution / 2 students
    - Pick up dog poop / 19 students
    - Clean oil spills / 5 students
    - Use Compost and not Fertilizers / 12 students
    - Don't use pesticides / 13 students
- Watershed Ecosystems - Bothell – 7 May 2018 – Skyview - Kull 1  
Question #5: List 5 ways you can keep water in our rivers, lakes, streams and Puget Sound healthy.  
*Post-Survey:*
    - Keep storm drains clean / 1 student
    - Don't put paint in sink / 1 student
    - Use water in moderation / 5 students
    - Do not pollute/litter / 25 students
    - Recycle / 3 students
    - Educate others on Pollution / 2 students
    - Carpool, bus, bike, walk, etc. Instead of cars/ 13 students
    - Pick up dog poop / 17 students
    - Electric car / 4 students
    - Put cigarettes in right disposal / 5 students
    - Clean oil spills / 2 students
    - Use Compost and not Fertilizers / 1 student
    - Don't use pesticides / 3 students
    - Put out more trash cans on street/ 5 students
    - Use eco-friendly products / 1 student
    - Make rain gardens / 2 students
    - Use Carwash / 1 student
- Watershed Ecosystems - Bothell – 7 May 2018 – Skyview - Kull 2  
Question #5: List 5 ways you can keep water in our rivers, lakes, streams and Puget Sound healthy.  
*Post-Survey:*
    - Keep storm drains clean / 1 student
    - Don't put paint in sink / 9 students

- Do not pollute/litter / 19 students
- Don't let the faucet run / 2 students
- Fix leaks / 1 student
- Recycle / 8 students
- Educate others on Pollution / 1 student
- Carpool, bus, bike, walk, etc. Instead of cars/ 11 students
- Pick up dog poop / 9 students
- Electric car / 9 students
- 5-10 min. Shower / 1 student
- Put cigarettes in right disposal / 8 students
- Clean oil spills / 5 students

## Teacher Satisfaction Results 2018

*This program was great and Rachel was fantastic! She was engaging with the kids and had great classroom management. I would love to use the programs in the classroom next year. I have letters from the kiddos coming your way with some stories and things they have learned!*

-Reesa Olivares, Westhill Elementary

*This program was wonderful and my students love their terrariums! Rachel was knowledgeable and great with the kids. I would love to do another program from Nature Vision next year. Earlier in the year we learned about cycles and only spend 1 day on the water cycle so the review and further understanding of the water cycle was good for the kids. I heard them saying I remember this from before but now we get to see rain in our own cup! Also many of them said they were excited to show their parents and siblings when they got home. Thank you for your time and knowledge! I would highly encourage this sponsor to fund this program next year.*

-Ashley Amundsen, Westhill Elementary

*Kirsten did a fantastic job engaging the students in her presentation and being patient with the students during the project. She responded well to student questions and comments, adding to students' current knowledge and corrected some misunderstandings. I appreciated her efficiency as well. I would love to have this program next year and encourage the City of Bothell to continue fund Nature Visions visits to schools.*

-Kirsten Jackson, Woodin Elementary

Are there any improvements you would like to suggest? *No, the program was great as is!*

Would you like to see these programs in your school next year? *Yes!*

Also, we would like to hear any special stories or examples of how this program helped your students gain awareness, understanding, or appreciation of ecological concepts. *Learning about the water cycle and making terrariums really set my students up for success for the plant and animal survival science unit.*

Would you encourage this sponsor to fund this program next year? *Yes!*

-Brittany Williams, Crystal Springs Elementary

*The program was great. My Kinders really enjoyed making the terrariums. Mike was so on their level. I just wish that there was more time discussing the water cycle as we had to zip through it. I would definitely like to do this again next year!*

-Shui Li-Green, Crystal Springs Elementary

*The program was engaging and age appropriate. The children had fun and it was well-orchestrated. Additionally, Mr. Mike was excellent. His time spent addressing the class was personable, engaging, and clear enough for kindergarteners to understand. He was well organized. It was a great additional supplement to what we are already doing regarding science and the environment. This program helped give students a visual example of what the water cycle is and helped us to start thinking about water awareness and how we can be more conservative. It was an informative and engaging experience and the kids loved it.*

-Shelby Hemp, Crystal Springs Elementary

Are there any improvements you would like to suggest? *No*

Would you like to see these programs in your school next year? *Yes*

Also, we would like to hear any special stories or examples of how this program helped your students gain awareness, understanding, or appreciation of ecological concepts. *I had a guest teacher the day Nature Vision presented this year, but the kids shared about all the learning and exploration they experienced, and it sounded amazing as usual. I also heard that the instructor was knowledgeable and great with management.*

Would you encourage this sponsor to fund this program next year? *Definitely!*

-Noelle Orkney, Westhill Elementary

*Thank you for reaching out. I did the "Water Cycle Terrariums" program with a first grade class of mine a few years ago, but I think I loved the program/presentation even more this time around. Kirsten was wonderful. My kids totally enjoyed themselves. I have no improvements to share, but I definitely want to see this programs in our school next year. This is a silly story, but the kids and I ate lunch outside this week to enjoy the beautiful weather. One of my students accidentally spilled his chocolate milk and another student said, "Well next time it rains it is going to rain chocolate milk! The water cycle at work!" He was thinking! I would encourage the City of Bothell - KCD to continue to sponsor this program next year. It is great!*

-Keyna Shumaker, Westhill Elementary

*The program was engaging and age appropriate. The children had fun and it was well-orchestrated. Additionally, Mr. Mike was excellent. His time spent addressing the class was personable, engaging, and clear enough for kindergarteners to understand. He was well organized. It was a great additional supplement to what we are already doing regarding science and the environment. This program helped give students a visual example of what the water cycle is and helped us to start thinking about water awareness and how we can be more conservative. It was an informative and engaging experience and the kids loved it.*

-Shelby Hemp, Crystal Springs Elementary

*Mike was amazing and worked so well with our Kindergarteners. Mike did an especially great job of connecting with the students and using the classroom to know how to call on students by name and groups without teacher assistance. We would definitely like this program at our school next year!*

-Leinani Manabat, Crystal Springs Elementary

Are there any improvements you would like to suggest? *No*

Would you like to see these programs in your school next year? *Yes*

Also, we would like to hear any special stories or examples of how this program helped your students gain awareness, understanding, or appreciation of ecological concepts. *This presenter*

*did an excellent job of classroom management and the students were very engaged. I am happy that the learnings were incorporated with the science we are currently learning.*

-Janet Clements, Shelton View Elementary

## **Discussion**

This ninth year of evaluating the City of Bothell Water Quality Education Programs has shown the programs to be effective in helping students learn about and understand stormwater quality, pollution prevention, how natural water systems work, and human interactions with these water systems. Additionally, students have learned best management practices to help keep our watershed healthy alongside their families and friends.

The short term retention of the key messages and concepts is on par with previous results. Students are showing an excellent points spread between pre and post surveys, indicating significant short term retention. We did not receive any 60 days data back due to the timing of the classes surveyed.

Exposure to key messages in schools each year is helping students to develop the desired culture of sustainability in our watersheds. We believe this is a result of students taking classes with us year to year as they progress through grade levels, and schools being willing to integrate standard-supportive environmental education programming into their curriculum. Students that participate in these classes as they progress through elementary and secondary education have a strong knowledge base so we can take them much further in their learning, and thus willingness to take action.

## Appendix: Surveys

### Water Cycles Round 4-5 | Bothell | Date | School | Teacher - Grade

- 1) The water cycle is a process where:
  - a) People clean and recycle water in treatment plants
  - b) Nature cleans and recycles water over and over again
  - c) People take water out of the environment to use
- 2) Water is a finite resource, which means:
  - a) There is enough water for all living things to survive comfortably
  - b) There is a limited amount of water on the planet for all to use
  - c) It goes through the water cycle
- 3) Water conservation means:
  - a) Protecting the environment so that it does not change
  - b) Holding more water for people and less for wildlife
  - c) A careful preservation and protection of water supply
- 4) Since almost 75% of Earth is covered in water, we do not need to worry about running out of water we can use.
  - a) True
  - b) False
- 5) List 5 ways you can help keep water in our rivers, lakes, streams and Puget Sound healthy.

### Watershed Ecosystems 6-8 | Bothell | Date | School | Teacher - Grade

- 1) A watershed is:
  - a) A building where water is stored and treated
  - b) An area of land where water drains and collects at the lowest spot
  - c) An area set aside to protect wildlife
- 2) A wetland is:
  - a) An area of land that is always covered in water
  - b) A unique ecosystem that has hydric soil and water-loving plants
  - c) An area of land that has quick sand
- 3) Water is a(an):
  - a) Finite Resource
  - b) Infinite Resource
- 4) Roads and parking lots are also part of our watershed.
  - a) True
  - b) False
- 5) List 5 ways you can help keep water in our rivers, lakes, streams and Puget Sound healthy.

# Understanding Stormwater Terminology

When we talk about stormwater, we tend to use a number of technical terms. That's why we are working regionally to come up with some stormwater terms and concepts that are easier to understand. In the mean time, here are definitions to help explain some of the most common stormwater terms.

## A

**Aquifer:** A layer of sand, gravel and clay below the earth's surface with enough water for people to withdraw for use (through wells and springs). Rainwater soaks into the ground and fills aquifers.

## B

**Backwater:** Water upstream from an obstruction which is deeper than it would normally be without the obstruction.

**Baffle:** A device to deflect, regulate, or check flow.

**Basin:** Any area draining to a point of interest, like into the Sammamish River.

**Beaver Deceiver:** A constructed flow device that reduces beaver damming activities. It is a non-lethal beaver management technique. Learn more about beavers and regulations on the [Washington Department of Fish & Wildlife's website](#).

**Berm:** A constructed barrier of compacted earth.

**Best Management Practices (BMPs):** A Best Management Practice is a behavior or action that a person performs that protects the health of the environment. [Learn about simple BMPs you can do every day.](#)

**Bioinfiltration:** Bio refers to living things. Bioinfiltration uses plants and soil to help rainwater soak in.

**Bioswale:** A long, shallow ditch with gently sloping sides and various layers of soils beneath intended to slow stormwater runoff and direct it to an area where it can soak in. Grass is the most common vegetation for bioswales, but wetland vegetation is an option if the soil is saturated. [Learn more about bioswales.](#)

**Brackish water:** Water that has more salt than freshwater, but not as much as seawater. It may result from mixing of seawater with fresh water, as in estuaries, or it may occur in brackish fossil aquifers.

**Buffer:** A designated area adjacent to and a part of a steep slope or landslide hazard area which protects slope stability, attenuation of surface water flows, and landslide hazards reasonable necessary to minimize risk. A buffer may also be a designated area adjacent to or part of a stream or wetland that is an integral part of the stream or wetland ecosystem.

## C

**Catch Basin, Type 1:** An underground concrete water receiving inlet, rectangular in shape (approximately 3' x 2' x 4' deep) with a slotted iron grate on top to inlet water or a solid rectangular cover. Water may also enter/exit through culverts visible in the side walls of basin. Also referred to as Inlet.

**Catch Basin, Type 2:** A round concrete underground basin (4' - 8' diameter; 6' or greater deep). It may contain a Flow Restrictor/Oil Pollution control device. These basins may also be required when larger diameter culverts are used. Also referred to as a Manhole or Control Manhole.

**Catch Basin Insert:** A device installed underneath a catch basin inlet to treat stormwater through filtration, settling, absorption, adsorption, or a combination of these mechanisms. There are a number of shapes, sizes, and configurations of inserts available.

**Channel:** A long, narrow excavation or surface feature that conveys surface water and is open to the air. Channels may be constructed or natural.

**Cistern:** A waterproof receptacle for holding liquids, usually water. Cisterns are often built to catch and store rainwater. Cisterns are distinguished from wells by their waterproof linings

**Clean Water Act (CWA):** The federal environmental law that includes the management of stormwater. Learn more about the Clean Water Act on the [Environmental Protection Agency's website](#).

**Constructed Conveyance System Facilities:** Gutters, ditches, pipes, channels, and most flow control and water quality treatment facilities.

**Conveyance System:** Drainage facilities and features that collect, contain, and provide for the flow of surface and storm water from the highest points on the land down to a receiving water. Conveyance systems are made up of natural elements and of constructed facilities.

**Critical Areas:** These are areas where flooding and/or erosion conditions present an imminent likelihood of harm to the welfare and safety of the surrounding community.

**Culvert:** Pipe or concrete box structure which drains open channels, swales, or ditches under a roadway or embankment typically with no catch basins or manholes along its length.

**Curb and Gutter:** Pathway along streets that directs stormwater to a storm drain and into a pipe to be transported to a stream or river. Curbs and gutters are often referred to as gray infrastructure.

## D

**Detention:** Release of surface and stormwater runoff from the site at a slower rate than it is collected by the drainage facility system, the difference being held in temporary storage.

**Detention Facility:** A facility that collects water from developed areas and releases it at a slower rate than it enters the collection system. The excess of inflow over outflow is temporarily stored in a pond, tank, or vault and is typically released over a few hours or a few days.

**Determination of Non-Significance (DNS):** The written decision by the responsible official of the lead agency that a proposal is not likely to have a significant adverse environmental impact per the SEPA process.

**Direct Discharge:** Undetained discharge from a proposed project to a major receiving water.

**Discharge:** Runoff, not including offsite flows, leaving the proposed development through overland flow, built conveyance systems, or infiltration facilities.

**Ditch:** A constructed channel with its top width less than 10 feet at design flow.

**Diversion:** A change in the natural discharge location or runoff flows onto or away from an adjacent downstream property.

**Downspout:** The part of roof gutters that directs water away from a building. These are best directed onto planted areas to reduce the amount of water that runs off a property and to make good use of the rain.

**Drainage:** The collection, conveyance, containment, and/or discharge of surface and stormwater runoff.

**Drainage Facility:** A constructed feature that collects, conveys, stores or treats surface and stormwater runoff. Drainage facilities include but are not limited to all constructed or engineered streams, pipelines, channels, ditches, gutters, lakes, wetlands, closed depressions, flow control or water quality treatment facilities, erosion and sedimentation control facilities, and other drainage structures and appurtenances that provide for drainage.

**Drinking Water:** Water that has been treated so it is safe to drink, cook with, etc. Facilities, staff, energy, and money are required to treat water. Conserving drinking water helps municipalities save money.

**Dry Season:** May 1 to September 30.

## E

**Ecosystem:** Community of living things (plants, animals, microorganisms) and nonliving things (water, air, soil) that interact to create habitats. When water is polluted, the ecosystem is impaired.

**Environmental Impact Statement (EIS):** A document that discusses the likely significant adverse impacts of a proposal, ways to lessen the impacts, and alternatives to the proposal. It is required by the national and state environmental policy acts when projects are determined to have the potential for significant environmental impact.

**Embankment:** A structure of earth, gravel, or similar material raised to form a pond bank or foundation for a road.

**Erosion:** The process that moves material, especially soil, from one location to another. It is caused by the action of wind, water, ice, or other forces working on the Earth's surface. Runoff water increases erosion.

**Estuary:** A partially enclosed coastal body of brackish water with one or more rivers or streams flowing into it, and with a free connection to the open sea. Estuaries form a transition zone between river environments and maritime environments. They are subject both to marine influences—such as tides, waves, and the influx of saline water—and to riverine influences—such as flows of fresh water and sediment. The mixing of sea water and fresh water provide high levels of nutrients both in the water column and in sediment, making estuaries among the most productive natural habitats in the world.

**Eutrophic:** A condition of a water body in which excess nutrients, particularly phosphorous, stimulates the growth of aquatic plant life usually resulting in the depletion of dissolved oxygen. When this happens, less

dissolved oxygen is available to other aquatic life.

## F

**Filtration:** Passing a fluid through a medium to separate solids such as when water passes through soil and solids are trapped by soil particles or plant roots. When water runs directly into a storm drain, it is not filtered as it is when allowed to flow through and soak into a planted area first.

**Flow Control Facility:** A drainage facility designed to mitigate the impacts of increased surface and stormwater runoff generated by site development. Flow control facilities are designed to either hold water for a considerable length of time and then release it by evaporation, plant transpiration, and/or infiltration into the ground, or to hold runoff for a short period of time and then release it to the conveyance system.

**Flow Restrictor:** A control device or T section with a specifically sized orifice to control release rates.

**Fresh Water:** Water that is not salty. Only about 3% of the Earth's water is fresh water. As Earth's population grows, the demand for fresh water increases.

## G

**Groundwater:** Water that exists underground in the cracks and spaces in soil, sand, and rock. Groundwater is usually stored in aquifers and originates from infiltration. Much of the water used for drinking and irrigation comes from groundwater.

## H

**Habitat:** The specific area or environment in which a particular type of plant or animal lives and grows.

**Headwaters:** Source of a stream.

**Hydrologic Cycle:** The circuit of water movement from the atmosphere to the earth and return to the atmosphere through various stages or processes such as precipitation, interception, runoff, infiltration, percolation, storage, evaporation, and transpiration.

## I

**Impervious Surface:** Any surface that water cannot soak into such as streets, sidewalks, driveways, rooftops, and compacted soils. Urban areas have lots of impervious surfaces, so there is more stormwater runoff. Common impervious surfaces include rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, and packed gravel roads.

**Infiltration:** Process of moving water into the soil from the surface. Infiltration is the focus of many new stormwater management practices. These practices are referred to as green infrastructure.

**Infiltration Facility:** A drainage facility designed to use the hydrologic process of water soaking into the ground (commonly referred to as percolation) to dispose of surface and stormwater runoff. Types of infiltration facilities may include basins, ponds, and tanks.

**Illicit Discharge:** Any discharge to a municipal separate storm sewer system (MS4) that is not composed entirely of stormwater, with some exceptions. [Learn about examples of illicit discharges and what to do when you see one.](#)

**Illicit Discharge Detection and Elimination (IDDE):** A program whose purpose is to find, fix and prevent illicit discharges through a series of techniques and awareness campaigns.

**Inlet:** See Catch Basin, Type 1.

**J**

**K**

**L**

**Low Impact Development (LID):** Techniques and design considerations that help manage the rainwater that falls on your property by allowing some to evaporate back into the air, some to absorb into the ground, some to be captured and used later as needed, and the rest to slowly pass into the stormwater system and into nearby streams. [Learn about low impact development techniques in Bothell.](#)

**M**

**Manhole:** See Catch Basin, Type 2.

**Municipal Separate Storm Sewer System (MS4):** A storm system that flows through its own set of pipes rather than being combined with the sewer system. Bothell has its own storm system which does not receive

treatment before it discharges into streams, lakes, and rivers.

## N

**National Pollutant Discharge Elimination System (NPDES):** A permit program, created in 1972 by the Clean Water Act (CWA), that helps address water pollution by regulating point sources that discharge pollutants to waters of the United States. [Learn more about the NPDES permit program.](#)

**Natural Conveyance System Elements:** Swales and small drainage courses, streams, rivers, lakes, and wetlands.

**Natural Onsite Drainage Feature:** A natural swale, channel, stream, closed depression, wetland, or lake.

**Nonpoint Source Pollution:** Pollution that cannot be easily traced to one source or property because small amounts come from many sources and properties. It occurs when rainfall, snowmelt, or irrigation runs over land or through the ground, picks up pollutants, and deposits them into streams, rivers, lakes, and coastal waters or introduces them into groundwater. These numerous small amounts of pollutants eventually accumulate to become harmful amounts.

**Nonstructural BMP:** A preventative action to protect receiving water quality that does not require construction. Nonstructural BMPs rely predominantly on behavioral changes in order to be effective. Major categories of non-structural BMPs include education, recycling, maintenance practices and source controls.

## O

**Oil/Water Separator:** A vault, usually underground, designed to provide a quiescent environment to separate oil from water. Floatables are also removed.

**Outfall:** A point where collected and concentrated surface and stormwater runoff is discharged from a pipe system or culvert.

## P

**Pervious (porous) Surface:** A surface that allows water and air to move into and through it (i.e. soil, porous pavers). A new type of pervious concrete is now being used to pave driveways and parking lots.

**Point Discharge:** The release of collected and/or concentrated surface and stormwater runoff from a pipe, culvert, or channel.

**Point Source Pollutant:** Pollution that can be traced to a specific source or property such as a factory, and oil or chemical spill, or a wastewater treatment plant.

**Puget Sound:** A complex estuarine system of interconnected marine waterways and basins, with one major (Admiralty Inlet) and two minor (Deception Pass and Swinomish Channel) connections to the open Pacific Ocean via the Strait of Juan de Fuca. Its complex series of waterways were formed from receding glaciers that left the area about 14,000 years ago. The glaciers cut deep into the land to form valleys that eventually flooded, creating the intricate landscape that we know today. The Puget Sound coastline lies within 12 Washington State counties, while 14 counties lie within the entire watershed. Puget Sound has 1,332 miles of coastline, not including the San Juan Islands or the Strait of Juan de Fuca. Puget Sound is the third largest estuary (a partially enclosed body of water where saltwater and freshwater merge) in the United States. [See a map showing the Puget Sound watershed.](#)

## Q

## R

**Rain Barrel:** An irrigation system that collects and stores rainwater runoff through a drain (gutter) system. Rainwater storage tanks can store between 30 and 100 gallons of water. They are commonly made of wood or plastic.

**Rain Garden:** A bowl-shaped shallow planted area in the landscape where rain water collects and absorbs back into the soil. [Learn more about rain gardens.](#)

**Rainwater Harvesting:** Catching or collecting rainwater in a planted area (rain garden, green roof) or container (rain barrel, cistern) so less runs off. Harvested rainwater is often used instead of drinking water for irrigation.

**Receiving Waters:** Bodies of water or surface water systems receiving water from upstream man-made or natural systems.

**Retention:** The process of collecting and holding surface and stormwater runoff with no surface outflow.

**Riparian:** Pertaining to the banks of rivers and streams, and sometimes also wetlands and lakes.

**Riprap:** A facing layer or protective mound of stones placed to prevent erosion or sloughing of a structure of embankment due to the flow of surface and stormwater runoff.

**Runoff:** Water originating from rainfall and other precipitation that ultimately flows into drainage facilities, rivers, streams, springs, seeps, ponds, lakes, and wetlands as well as shallow groundwater.

# S

**Salish Sea:** The Salish Sea is the intricate network of coastal waterways that encompasses Puget Sound, the San Juan Islands and the waters off of Vancouver, BC. The area spans from Olympia, Washington in the south to the Campbell River, British Columbia in the north, and west to Neah Bay and includes the large cities of Seattle and Vancouver. It's one of the world's largest and biologically rich inland seas, and its name pays tribute to the first inhabitants of the region, the Coast Salish. [See a map and learn more about the Salish Sea.](#)

**Salmonid:** A member of the fish family Salmonidae, Common salmonid species in our area include Chinook, Coho, chum, sockeye, and pink salmon; cutthroat, rainbow, and brown trout and steelhead; Dolly Varden, brook trout, char, kokanee, and whitefish.

**Sediment:** Primarily eroded soil; also dirt from rooftops or paved surfaces. Sediment is often deposited in water bodies with runoff.

**Septic System:** An onsite wastewater collection system. [Learn more about septic systems.](#)

**Sewer System:** The system of pipes and pump stations that collect and transport wastewater from homes and businesses to a wastewater treatment plant. Wastewater typically comes from indoor sources like sinks, showers, bathtubs, toilets, and washing machines.

**Storm Drain:** An opening built into a curb or street and connected to a pipe to carry away stormwater.

**Storm Drain System:** The system of gutters, pipes, streams, or ditches used to carry surface and stormwater from surrounding lands to streams, lakes, rivers, and Puget Sound.

**Stormwater:** Water from rainfall and snow that runs off surfaces such as rooftops, paved streets, highways, and parking lots and flows into surface water including drainage facilities, rivers, streams, lakes, or Puget Sound. Stormwater can also come from hard grassy surfaces like lawns, play fields, and from graveled roads.

**Stormwater Engineer:** A person who designs solutions for problems created by surface water runoff and pollution.

**Stormwater Facility:** A facility that controls the discharge of stormwater. This includes storage facilities (ponds, vaults, underground tanks, and infiltration systems); water quality facilities (wetponds, bioswales, constructed wetlands, sand filters, and oil/water separators); and conveyance systems (ditches, pipes, and catch basins).

**Stormwater Management:** The application of site design principles and construction techniques to prevent sediments and other pollutants from entering surface or groundwater; source controls; and treatment of runoff to

reduce pollution.

**Stormwater Management Program (SWMP or SMP):** An annual report that describes proposed stormwater program activities for the coming year; also referred to as Stormwater Management Plan. [Learn about Bothell's current Stormwater Management Program.](#)

**Stormwater Pollution:** Anything in our stormwater that makes it unclean. This can include contaminants like soil, pesticides, litter, oil, grass clippings, tree leaves, and bacteria that are collected by stormwater flowing over a surface and then carried into surface water.

**Stormwater Runoff:** Rain that falls on streets, parking areas, sports fields, gravel lots, lawns, rooftops or other developed land and flows directly into nearby creeks, lakes, rivers, and Puget Sound. This runoff carries pollutants to these waterways. The more impervious surfaces there are, the more runoff there is and the faster it moves. Fast moving water can collect more pollutants and cause more erosion of soil and streambanks.

**Structural BMP:** Constructed facilities or measures to help protect receiving water quality and control stormwater quantity. Examples include storage, vegetation, infiltration, and filtration.

**Surface Water:** Water found above the land, including oceans, estuaries, lakes, rivers, streams, and ponds.

**Surface Water Design Manual:** The formally adopted manual describing surface and stormwater design and analysis requirements, procedures, and guidance. View Bothell's current Surface Water Design Manual as Chapter Four in the [Bothell Design and Construction Standards and Specifications.](#)

## T

**Total Maximum Daily Load (TMDL):** A calculation of the maximum amount of pollutant that a waterbody can receive and still meet water quality standards. Water quality standards identify the uses for each waterbody, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The [Clean Water Act \(CWA\), section 303](#), establishes the water quality standards and TMDL programs.

**Toxic:** Poisonous, carcinogenic, or otherwise directly harmful to life.

## U

## V

# W

**Wastewater Treatment (Sewage) Plant:** Municipal plant that treats wastewater (water from toilets, washing machines, dishwashers, showers, etc.) before it is released into a stream or river. In most communities, including Bothell, stormwater is not treated before it is released into a stream or river.

**Water Cycle:** The continuous movement of water through its liquid, gas, and solid phases above, on and below the Earth. The water on Earth today is the same water as when Earth was formed. New water is not added to the Earth when it rains.

**Water Resource Inventory Area (WRIA):** This is another term for a watershed. Department of Ecology typically studies and regulates water resources by WRIs. There are 62 WRIs in Washington state. Bothell is located in WRIA-8, the Cedar-Sammamish watershed.

**Watershed:** The entire land area from which water drains into a particular surface water body such as a lake, stream, or river. We all live in a watershed, and we all live upstream or downstream from other watersheds. [Learn more about watersheds.](#)

**Wet Season:** October 1 to April 30.

**Wetland:** An area inundated or saturated by ground or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

**Wetpond/Wetvault:** Drainage facilities for water quality treatment that contain a permanent pool of water. They are designed to optimize water quality by providing long retention times (on the order of a week or more) to settle out particles of fine sediment to which pollutants such as heavy metals adsorb, and to allow biologic activity to occur that metabolizes nutrients and organic pollutants. For wetvaults, the permanent pool of water is covered by a lid which blocks sunlight from entering the facility, limiting light-dependent biologic activity.

# X

# Y

# Z

# BothellCool



## What is BothellCool?

BothellCool is the City of Bothell's sustainability program. It focuses on helping the community reduce their environmental impacts while improving their community and standard of living. Check out the [BothellCool Vision Statement \(PDF\)](#).

## The City's sustainable programs provide useful information about:

- Reusing
- [Recycling](#)
  - Waste Management: "[Recycle Often. Recycle Right.](#)" campaign
- [Reducing the use of hazardous material](#)
- [Proper disposal of hazardous material](#)
- [Reducing the number of single occupancy trips you take](#)
- [Protecting streams, lakes, and wetlands](#)
- [Properly disposing of pet waste](#)
- [Preventing and responding to hazardous spills](#)
- [Reducing hazardous chemicals in our environment](#)
- [Reducing polluted wash water from car washing and home repair and maintenance](#)
- Learn more about [Zero Waste](#)
- [Composting at home](#)
- [Buying local and organic](#)
- Powering down electronic devices
  - [PSE - Energy Saving Tips](#)
  - [PUD - Energy Saving Tips](#)
- Checking for [vehicle leaks](#)
- [Saving water](#)
- Buying gifts for the [experience](#) instead of packaging

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- and more...

## Garbage Service Providers



# Household Stormwater Pollution

## PREVENTION TIPS

### ABOUT HOUSEHOLD STORMWATER POLLUTION

Household stormwater pollution happens when contaminants from homes and cars go down the storm drains. When it rains, the pollutants from our yards, vehicles, and pets are carried away to the storm drains. The polluted water flows – untreated – to our streams, lakes, and Puget Sound. As our population continues to grow, the pollution problem is getting worse.

By making simple but conscientious choices, you'll do your part to leave a legacy of clean water for future generations.



### COMMON SOURCES OF HOUSEHOLD POLLUTION

- Motor oil and antifreeze from parking areas and driveways
- Soapy water from car washing
- Fertilizers and pesticides on lawns
- Pet waste

### HOW YOU CAN HELP PREVENT POLLUTION AT HOME

#### VEHICLES

- Use a commercial car wash
- Keep your car, boat, motorcycle, and other equipment well-maintained and leak-free
- Clean drips and spills with absorbent pads, cat litter, or sand and put it in the garbage before the next rainfall
- Don't dump oils and chemicals to the ground or stormwater system – take them to a disposal site like the Wastemobile instead



#### LAWN, GARDEN, AND PETS

- Use fertilizers and pesticides sparingly, if at all
- Plant native plants and grasses
- Keep yard waste and debris away from storm drains
- Pick up your pet's waste in public and at home, bag it, and throw it in the trash – **not** your yard waste bin

#### AT HOME

- Choose non-toxic, biodegradable products
- Pour carpet cleaning wastewater in the sanitary sewer (inside) – not a storm drain (outside)
- Don't let hazardous materials pile up in your home – both inside and outside
- Dispose of all hazardous products at a designated collection site like the Wastemobile

### LEARN MORE

Visit [bothellwa.gov/pugetsound](http://bothellwa.gov/pugetsound) and [pugetsoundstartshere.org](http://pugetsoundstartshere.org) for more ways to help.



# Responsible Home Maintenance

## Stay green with home maintenance and repairs

Summer is almost here, along with the nice weather. It's a great time to tackle some of those home maintenance or repair projects you've been putting off, or spruce up your yard. But remember – allowing any polluted wash water into the streets and storm drains is against the law ([BMC 18.04.260](#)). Whether you're doing the work yourself or hiring a contractor, you're responsible for what goes into the public storm system.

### Common sources of pollution

- Pressure washing
- Vehicle maintenance
- Car washing
- Chlorinated water from a swimming pool
- Pesticides and fertilizers
- Painting
- Carpet cleaning
- Concrete work

### Carpet cleaning



Pollutants from these activities can harm you, your pets, and the environment. Protect yourself, your family, and your local streams by keeping polluted wash water out of Bothell's storm drains.

When hiring a professional to do the work, use carpet cleaning, maintenance, and pressure washing services that don't dump their wash water into our storm drains.

# Contact us

## Christi Cox

Surface Water Program Coordinator

[Email](#)

## Spill Hotline

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any storm drains or local streams.

Select Language ▼

# Pressure washing responsibly

Before you start pressure washing, learn how to do it safely, responsibly, and legally.

## What the law says

Here's what [Bothell Municipal Code 18.04.260](#) says about pressure washing:

"b. **Conditional Discharges.** The following discharges shall not be considered illegal discharges for the purposes of this chapter *if they meet the stated conditions* or unless the director determines that the type of discharge, whether singly or in combination with others, is causing or is likely to cause pollution of surface water or ground water:

*(4) Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents are permitted if the amount of street wash and dust control water used is minimized. At active construction sites, street sweeping must be performed prior to washing the street."*

## So what does that mean?

It means you can't use soap or chemicals and you need to take steps before you pressure wash to minimize what goes down the storm drain. Read the tips below to learn how to pressure wash responsibly and stay on the right side of the law.



# how to pressure wash responsibly

**\*DON'T USE SOAP OR CHEMICALS**

## before you wash

- Absorb oil spots with kitty litter (or other absorbent) and sweep up
- Sweep up and dispose of trash, debris and dirt
- Place filter fabric on storm drain to catch debris
- Set up gravel bags around storm drain to anchor filter fabric
- Place spill boom to absorb oil in wash water

## while washing

- Use cold water only  
**(NO SOAP OR CHEMICALS)**
- Only discharge filtered water to storm drain

# Maintaining your vehicle

Have a leaky vehicle? Even a single drop on your driveway can mean a shorter lifespan for your car. Leaks are the largest polluters of Puget Sound, so letting your vehicle leak has a major impact on the health of our local waters. Whether you're driving in a leaky vehicle or doing any maintenance in your driveway or street, you should understand what's legal and what's not.

## What the law says

Here's what [Bothell Municipal Code 18.04.260](#) says about auto fluids going down our storm drains:

**"It shall be prohibited and in violation of this chapter for any person or entity to:**

A. Throw, drain, or otherwise discharge, cause or allow others under its control to throw, drain or otherwise discharge into the municipal storm drain system and/or surface and ground waters any materials other than storm water. Examples of prohibited contaminants include but are not limited to the following:

- ...3. Petroleum products including but not limited to oil, gasoline, grease, fuel oil and heating oil.*
- 4. Antifreeze and other automotive products.*
- 5. Metals in either particulate or dissolved form."*

## So what does that mean?

It means you can't knowingly let auto fluids leak from your vehicle onto the street. If you know you have a leaky vehicle or are doing maintenance, always use or drop cloth or appropriate container under your vehicle when it's parked to ensure any dripping fluids are contained.

## How do I know if I have a leak?

Check out our [Vehicle Leaks webpage](#) to learn how to check for leaks. [Fixcarleaks.org](#) helps you identify the particular fluid leaking from your vehicle.

Select Language ▼

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### **What do I do if I have a leak?**

Get it fixed right away to avoid costly repairs down the road. Visit [fixcarleaks.org](http://fixcarleaks.org) for a list of certified mechanics, a free leak check, and upcoming leak identification workshops.

### **Don't drip & drive!**

Learn more about vehicle leaks at [bothellwa.gov/vehicleleaks](http://bothellwa.gov/vehicleleaks).



# Washing cars in your driveway or street

Vehicle wash water contains pollutants like oil, grease, heavy metals, solvents and soaps. When these harmful pollutants run off our driveways and roads, they go down the storm drain and travel to our local streams, lakes, rivers, and Puget Sound.

## What the law says

Here's what [Bothell Municipal Code 18.04.260](#) says about allowing car wash water to run off your driveway into the street and storm drains:

**"It shall be prohibited and in violation of this chapter for any person or entity to:**

A. Throw, drain, or otherwise discharge, cause or allow others under its control to throw, drain or otherwise discharge into the municipal storm drain system and/or surface and ground waters any materials other than storm water. Examples of prohibited contaminants include but are not limited to the following:

*3. Petroleum products including but not limited to oil, gasoline, grease, fuel oil and heating oil.*

*4. Antifreeze and other automotive products.*

*5. Metals in either particulate or dissolved form.*

*15. Soaps, detergents, or ammonia."*

## So what does that mean?

It means that it is legal for you to wash your car at home, but it is illegal to let the vehicle wash water run into the street or storm drains. Vehicle wash water contains harmful pollutants that degrade our streams and marine life.

## Where am I supposed to wash my car?

Whenever possible, use a commercial car wash. If that's not an option, wash your vehicle over a permeable surface like grass or gravel that will allow the wash water to soak in and filter out pollutants. If you wash over grass or gravel, please use a chlorine and phosphate-free, biodegradable soap to help protect your soil.

## Can't I just use biodegradable soap?

No. "Biodegradable" soap still pollutes water. These products are meant to biodegrade in soil where microorganisms are present to break them down. Even if there was a soap that actually did biodegrade in water, there would still be all the dirt, oil, grease, and metals from the car washing that would end up in the nearest waterway.

Visit our [Car Washing webpage](#) to learn more about car washing, alternatives to driveway washing, and environmentally-friendly [fundraising options](#).



# Draining your swimming pool or spa

Before you empty out your pool or spa, you should know how to do it safely, responsibly, and legally.

## What the law says

Here's what [Bothell Municipal Code 18.04.260](#) says about emptying your pool or spa into a storm drain:

**"It shall be prohibited and in violation of this chapter for any person or entity to:**

A. Throw, drain, or otherwise discharge, cause or allow others under its control to throw, drain or otherwise discharge into the municipal storm drain system and/or surface and ground waters any materials other than storm water. Examples of prohibited contaminants include but are not limited to the following:

...16. *Swimming pool or spa filter backwash.*

17. *Chlorine, bromine, or other disinfectants.*

18. *Heated water."*

**However, if you keep reading the code, it says pool and spa discharges are allowed as long as they have been de-chlorinated.**

*"b. **Conditional Discharges.** The following discharges shall not be considered illegal discharges for the purposes of this chapter if they meet the stated conditions or unless the director determines that the type of discharge, whether singly or in combination with others, is causing or is likely to cause pollution of surface water or ground water:*

*(3) **De-chlorinated swimming pool discharges.** These discharges shall be de-chlorinated to a concentration of 0.1 parts per million or less, pH-adjusted, and re-oxygenated if necessary and in volumes and velocities controlled to prevent re-suspension of sediments in the storm water system. These discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the surface and storm water management system."*

## So what does that mean?

It means you have to de-chlorinate the water in your pool or spa if you're going to let it drain into a storm drain.

## How do I de-chlorinate the water?

You have a few options.

1. Simply stop adding chlorine to your uncovered pool and wait. Sunlight will help to naturally dissipate the chlorine within two weeks. During that time, use a swimming pool test kit to measure chlorine.
2. Chemically dechlorinate the pool water. Chemicals that will quickly remove chlorine are available through pool and spa care vendors. Follow the directions on the product label.

## Above-ground swimming pool



## Things to know about chlorine

Chlorine is one of the most common chemical additives used to control bacterial growth in swimming pools. With proper chlorination, swimmers can allow pool water to contact the skin and incidentally swallow some pool water with little fear of infection. But as beneficial as chlorine can be, its release into the environment is illegal and punishable by law. The federal Clean Water Act prohibits the discharge of pollutants to state waters. Even seemingly small concentrations of chlorine can harm or kill aquatic life. It's also against Bothell Municipal Code to discharge chlorinated water without first reducing chlorine to acceptable levels ( $< 0.1$  mg/L). A pool test kit will help you to monitor chlorine. Some test kits will allow you to measure other important water quality parameters like pH, hardness, and alkalinity in addition to total and free chlorine. Follow the chemical use, handling, and storage instructions carefully, as some de-chlorination products can become dangerous when brought into contact with other pool maintenance chemicals. (See <https://doee.dc.gov/service/how-drain-your-swimming-pool-properly>)

# Using pesticides and fertilizers

Before you use pesticides and fertilizers on your lawn, consider giving [Natural Yard Care](#) a try instead. You'll keep your lawn, garden, kids, pets, and wildlife safer by skipping the chemicals.

## What the law says

Here's what [Bothell Municipal Code 18.04.260](#) says about allowing pesticides and fertilizers to go down the storm drains:

**"It shall be prohibited and in violation of this chapter for any person or entity to:**

A. Throw, drain, or otherwise discharge, cause or allow others under its control to throw, drain or otherwise discharge into the municipal storm drain system and/or surface and ground waters any materials other than storm water. Examples of prohibited contaminants include but are not limited to the following:

*...13. Pesticides, herbicides, or fertilizers."*

## So what does that mean?

It means you can't let the toxic chemicals from any pesticides and fertilizers you use on your yard and garden make their way into storm drains. Rather than using chemicals, you can find more environmentally-friendly lawncare techniques with [Natural Yard Care](#).

## Do you have old pesticides to get rid of?

The pesticides listed below have been canceled or restricted by the U.S.

## Wearing safety gear while applying pesticide

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Environmental Protection Agency because of their effects on human health or the environment. If you have products containing these ingredients, **don't use them.**

- 2,4,5-T
- Aldrin
- Clopyralid
- Chlordane
- Chlorpyrifos
- Diazinon
- DDT
- Dieldrin
- Heptachlor
- Kepone
- Lead arsenate
- Lindane
- Mirex
- Silvex
- Toxaphene



### **How to dispose of pesticides**

Unwanted lawn and garden chemicals can be harmful if not disposed of properly. Never place unused or partially used pesticides in the garbage or down the drain. Some older pesticide labels say that these products can be disposed of in the trash, but this is no longer allowable, and newer labels no longer suggest it.

Instead, take pesticides to a hazardous waste disposal site like the [Wastemobile](#).

## ▼ **Surface Water Management**

[Hide All Answers](#)

### 1. **Why should I scoop my pet waste?**

Pet waste is basically raw sewage. Dog poop contains harmful organisms like Roundworms, Giardia, and E. coli which can be transmitted directly to humans. These organisms can remain on your lawn for as long as four years threatening the safety of your pets and children. The only way to remove the danger is to pick up your pet waste and place it in the trash.

And if that's not enough of an incentive, you could also earn yourself a \$250 fine for leaving pet waste on public or private property ([BMC 6.16.011](#)).

[Learn more about picking up after your pet.](#)

### 2. **Why should I check my vehicle for leaks?**

Most auto fluids don't dissolve in water. They last a long time and stick to everything from sand to bird feathers. Oil and other petroleum products are toxic to people, wildlife, and plants. Rain washes the fluids that leaks from our cars onto driveways, roads, and into storm drains.

A small leak can turn into an expensive repair if you don't address it right away.

[Learn more about vehicle leaks](#) and how to identify what kind of fluid is leaking.

### 3. **Why use a public car wash?**

Washing your car at home sends pollutants from your car (oil, grease, fuel, heavy metals, nutrients, etc.) into our storm drains and directly into our rivers, lakes and wetlands. We also have a code in Bothell that makes it against the law to discharge any pollutants into the public drainage system ([BMC 18.04.260](#)). These pollutants include the soap and chemicals that are used to clean your vehicle - even biodegradable soaps. It's most eco-friendly to use a commercial car wash, a waterless car wash product, or divert your wash water to a permeable surface like grass or gravel.

[Learn more about car washing.](#)

## **Categories**

- [All Categories](#)
- [About Bothell](#)
- [Bids, Small Works, RFPs & RFQs](#)
- [City Clerk](#)
- [Construction Projects](#)
- [CPR/First Aid Classes](#)
- [Doing Business](#)
- [Employee FAQs](#)
- [Fire Department and Emergency Medical Services](#)
- [Fire recovery](#)
- [Fire Systems & Fire Watches](#)
- [Fireworks Regulations](#)
- [Garbage & Recycling](#)
- [GIS](#)
- [Hazardous Material Information](#)
- [Historic Preservation & Landmarks](#)
- [Jury Duty](#)
- [Main Street Enhancement](#)
- [Multiway Boulevard](#)
- [Parks & Recreation](#)
- [Passports](#)
- [Permit Center](#)
- [Police Department](#)
- [Public Safety](#)
- [Rain Gardens](#)
- [Recology](#)
- [Safe Streets & Sidewalks](#)

Select Language ▼

#### 4. **Are car washing fundraisers allowed in Bothell?**

It depends on what kind of car wash you're talking about. Allowing soapy car wash water to enter any storm drains in the city is a violation of [Bothell Municipal Code 18.04.260](#), even if you use biodegradable soap. Car wash runoff contains many harmful pollutants that lead to poor water quality when they get into our storm drains and streams. [Read more about the pollutants.](#)

But there are some alternatives to traditional car washing you can try:

- **Sell commercial car wash tickets.** Commercial car wash facilities will sell you discounted car wash tickets for \$1-2 that you can turn around and sell for \$8-10. Visit the [Puget Sound Car Wash Association](#) or [Brown Bear](#) to learn more.
- **Rent a car wash stall.** Some facilities allow you to rent a stall for the day.
- **Divert wash water.** Divert the wash water to a large grass or gravel surface that will allow the wash water to completely infiltrate into the soil.
- **Use waterless car washing products.** Waterless products with microfiber towels remove dirt without scratching the paint and provide a nice wax coat.

You can also check out a list of other [eco-friendly fundraising options](#) that don't necessarily involve car washing.

#### 5. **How do I report a spill?**

Report spills right away by calling the Spill Hotline at **425-806-6750**, or use the [online spill report form](#). Staff needs to know about spills as soon as possible so we can try to prevent them from going into our streams and other bodies of water.

#### 6. **What is natural yard care?**

Natural yard care includes build healthy soil, planting right for your site, practicing smart watering, and eliminating the use of harmful pesticides and fertilizers. [Learn all about it!](#)

#### 7. **What is LID?**

LID stands for **low impact development** techniques.

You can use these techniques and design considerations in building, construction, and development to help capture and move rainwater while improving the aesthetics of your property. Low impact development manages the rainwater that falls on your property by allowing some to evaporate back into the air, some to absorb into the ground, some to be captured and used later as needed, and the rest to slowly pass into the stormwater system and into nearby streams.

#### 8. **What is a rain garden?**

It's a landscaped, strategically placed, depressed area that is planted with native vegetation to soak up rain water. [Learn more about rain gardens.](#)

#### 9. **How do I build a rain garden?**

Check out this [rain garden manual](#) to teach you everything you need to know if you'd like to build a rain garden.

#### 10. **What is a bioswale?**

- [Safe Streets and Sidewalks Ballot Measure](#)
- [Sewer Service](#)
- [Sex Offender Information](#)
- [Sidewalk Maintenance](#)
- [Special Item Recycling](#)
- [Spills & Prevention](#)
- [Stormwater Maintenance and Inspections](#)
- [Street Maintenance](#)
- [Street Sweeping / Snow Removal](#)
- [Surface Water Management](#)
- [Sustainability Events](#)
- [Sustainamania](#)
- [Tourism Grant Program](#)
- [Traffic Infraction Procedures](#)
- [Traffic Signals / Street Lights & Signs](#)
- [Transportation](#)
- [Vendors & Contracts](#)
- [Volunteering](#)
- [Water Service](#)
- [Wayne Golf Course](#)

A shallow ditch with gently sloping sides and various layers of soils beneath. A bioswale - sometimes called a vegetated ditch - slows stormwater runoff and directs it to an area where it can soak in. It achieves the same goal as a rain garden, but is usually designed to manage a larger amount of runoff. A bioswale often uses grass and plants to stabilize the soil, reduce erosion, slow the flow, and absorb runoff.

[Learn more](#) about bioswales, their benefits, and how to take care of them.

11. **How do I properly dispose of hazardous materials?**

Check out [these options](#) for safely getting rid of your hazardous materials.

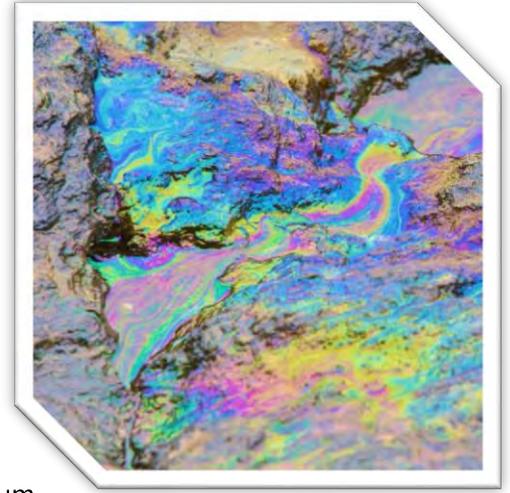
# Auto Fluids

# FACT SHEET

## WHERE WATER POLLUTION STARTS

More than 60% of water pollution comes from things like leaking fluid from cars, fertilizers and pesticides, and pet waste. All these sources add up to a big pollution problem. The biggest source of water pollution today is not industry – it's households like ours.

But each of us can do small things to help clean up our water. And it starts with realizing that our sewers and storm systems are separate. What goes into storm drains flows directly into our streams, lakes, rivers, and eventually the Puget Sound...**untreated**.



## WHAT'S THE PROBLEM WITH AUTO FLUIDS?

Most auto fluids don't dissolve in water. They last a long time and stick to everything from sand to bird feathers. Oil and other petroleum products are toxic to people, wildlife, and plants. One pint of oil can make a slick larger than a football field. Rain washes the fluids that leak from our cars onto driveways, roads, and into storm drains.

## A FEW FACTS TO THINK ABOUT

- Oil, antifreeze, and brake fluids contain heavy metals that can harm aquatic wildlife. The oil from just one oil change can pollute up to a million gallons of water.
- Used motor oil is the largest single source of oil pollution in our lakes, streams, and rivers. Americans spill 180 million gallons of used oil each year into our waters. This is 16 times the amount the Exxon Valdez spilled in Alaska (the oil spill that killed over half a million birds and other wildlife in 1989).

## WHAT YOU CAN DO

**How can you use auto fluids and help keep our waters clean at the same time?**

- Stop drips. Check for oil leaks regularly and fix them promptly. Keep your car tuned to reduce oil use.
- Use ground cloths or drip pans beneath your vehicle if you have leaks or are doing engine work. Clean up spills immediately. Collect all used oil and other fluids in containers with tight fitting lids. Don't mix different engine fluids.
- Use cat litter to soak up leaked oil, and then throw it in the trash once dry.
- Never dispose of oil or other engine fluids down the storm drain, on the ground, or into a ditch. Dumping automotive fluids into storm drains is just like dumping the materials directly into a body of water.
- Recycle used motor oil and other car fluids. Some auto supply stores and gas stations will accept used oil, or you can visit the Wastemobile (see the Wastemobile schedule at [www.hazwastehelp.org](http://www.hazwastehelp.org)).
- Buy recycled (re-refined) motor oil to use in your car.

## LEARN MORE

Visit [fixcarleaks.org/](http://fixcarleaks.org/) and [bothellwa.gov/pugetsound](http://bothellwa.gov/pugetsound) to find out more about vehicle fluids and water pollution prevention.



# VEHICLE LEAKS

## How to check for leaks

- 1) Park your vehicle in a place where you can safely access its underside.
- 2) Right after you turn off your car (while the engine is still warm), slide a drip sheet under the front of your vehicle beneath the engine. You could also use light-colored cardboard or white butcher paper.
- 3) Leave the drip sheet in place for a few hours. Secure it with rocks or something heavy to keep it in place.
- 4) Remove the drip sheet and check for leaks.
- 5) Use the color chart to help identify the leak. Make note of the color, texture, location, and odor of any leaking fluids.
- 6) Contact your mechanic for further evaluation and repair of any leaks. Visit [www.fixcarleaks.org](http://www.fixcarleaks.org) for a list of local AAA/ASA recommended mechanics.
- 7) Be sure to place cardboard or other container beneath your vehicle to catch any drips until the leaks are repaired.

[www.bothellwa.gov/vehicleleaks](http://www.bothellwa.gov/vehicleleaks)

## 6

### COMMON VEHICLE FLUID LEAKS

Visit [www.fixcarleaks.org](http://www.fixcarleaks.org) for a list of local AAA/ASA recommended mechanics.



Light brown to black, very greasy. Found under front half of vehicle.



Reddish pink and thin, or brown and thick. Might have a burnt smell. Found in the middle towards the front of vehicle.



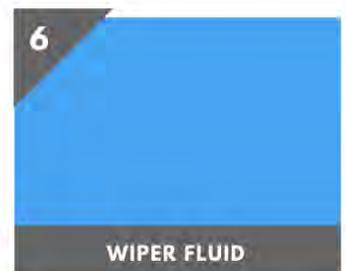
Amber, reddish, or clear. Found near very front of vehicle.



Clear to brown, slightly yellow and slick. Often appears near a wheel.



Neon yellow, green, orange, or pink and greasy. Found in the front most part of vehicle near radiator or under engine.



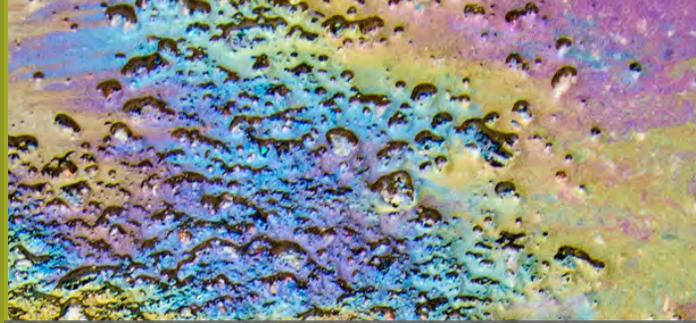
Bright blue or orange, very thin. Smells slightly of alcohol.

## WHERE WATER POLLUTION STARTS

More than 60% of water pollution comes from things like leaking fluid from cars, fertilizers and pesticides, and pet waste. All these sources add up to a big pollution problem. Today's biggest source of water pollution isn't industry, it's households like ours.

But each of us can do small things to help clean up our water. It starts with realizing that our sewers and storm systems are separate. Whatever goes into storm drains flows - untreated - directly into our streams, lakes, rivers, and eventually Puget Sound. This includes leaking auto fluids.

**DON'T DRIP & DRIVE!**



## CONTACT US



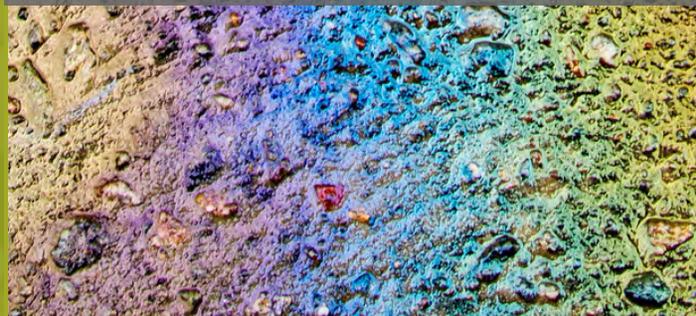
City of Bothell

Surface Water Division  
18415 101st Ave NE  
Bothell, WA 98011  
425-806-6104

[bothellwa.gov/vehicleleaks](http://bothellwa.gov/vehicleleaks)

## SPILL HOTLINE

425-806-6750



# VEHICLE LEAKS



How to check for leaks  
and why it matters



## WHAT'S THE PROBLEM WITH AUTO FLUIDS?

Most auto fluids don't dissolve in water. They last a long time and stick to everything from sand to bird feathers.

Oil and other petroleum products are toxic to people, wildlife, and plants. One pint of oil can make a slick larger than a football field!

Rain washes the fluids that leak from our vehicles onto driveways, roads, and into storm drains.

## A FEW THINGS TO THINK ABOUT

Oil, antifreeze, and brake fluids contain heavy metals that can harm aquatic wildlife. The oil from just one oil change can pollute up to a million gallons of water.

Used motor oil is the largest single source of oil pollution in our lakes, streams, and rivers. Americans spill 180 million gallons of used oil each year into our waters. This is 16 times the amount in the Exxon Valdez spilled in Alaska (the oil spill that killed over half a million birds and other wildlife in 1989).

## HOW YOU CAN HELP

### STOP DRIPS

Check for oil leaks regularly and fix them promptly. Keep your vehicle tuned to reduce oil use.

### USE GROUND CLOTHS OR DRIP PANS

Put them under your vehicle if you have leaks or you're doing engine work. Clean up spills immediately. Collect all used oil and other fluids in containers with tight fitting lids. Don't mix different engine fluids.

### USE CAT LITTER

Soak up leaked oil with cat litter, then throw it in the trash once it's dry.

### DON'T DUMP FLUIDS DOWN A STORM DRAIN

Never dispose of oil or other engine fluids down the storm drain, on the ground, or into a ditch. Dumping auto fluids into storm drains is just like dumping the materials directly into a local body of water.

### RECYCLE AUTO FLUIDS

Recycle used motor oil and other auto fluids. Some auto supply stores and gas stations accept them, or visit the Wastemobile ([hazwastehelp.org](http://hazwastehelp.org)).

### BUY RECYCLED MOTOR OIL

Use double refined motor oil.

## HOW TO CHECK YOUR VEHICLE FOR LEAKS

1. Park your vehicle somewhere you can safely access its underside.
2. Slide a white drip sheet or large piece of paper under the front of your vehicle (beneath the engine and as soon as you turn off your car, so the engine is still warm).
3. Leave the sheet in place for a few hours. Keep it secure with rocks or something heavy.
4. Remove the sheet and check for any drips and leaks.
5. Use the color chart below and note the color, texture, location, and odor of any leaking fluid.
6. Contact your mechanic (or visit [fixcarleaks.org](http://fixcarleaks.org) for a list) for further evaluation and to repair any leaks.
7. Keep cardboard or something similar under your vehicle to catch any drips until it's fully repaired.

#### Engine oil

Light brown to black, very greasy, thick, and found under front half of the vehicle

#### Brake fluid

Clear to brown, slightly yellow and slick, and often appears near a wheel

#### Transmission fluid

Reddish pink and thin or brown and thick, might smell burnt, found in middle and towards front of car

#### Antifreeze/coolant

Neon yellow, green, orange or pink, greasy, found in front part of vehicle near radiator or under engine

#### Power steering fluid

Amber, reddish, or clear, near very front of vehicle

#### Wiper fluid

Bright blue or orange, very thin, smells slightly of alcohol

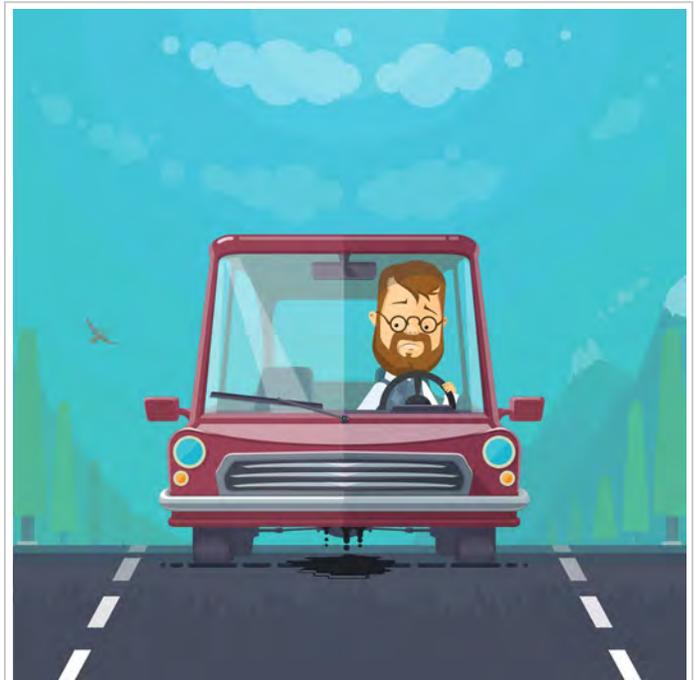
# Vehicle Leaks

## Get leaks checked quickly

Leaks can quickly turn expensive if not repaired immediately. Gaskets are cheap and can usually be replaced for under \$5. Some leaks may come from a loose part or filter that only needs to be tightened. Taking the time for proper repairs and maintenance will add years to the life of your vehicle and will help protect our streams for future generations.

Get a free leak inspection, learn how to prevent, check for and identify leaks, and find local mechanics on the [Fix Car Leaks](#) website.

## Don't drip and drive!



## Tips for finding the source of vehicle leaks

Vehicle leaks can be elusive as there are a number of fluids in your vehicle and they can come from a variety of areas. Matching the color, odor, consistency, and location of the leak will give you a very good indication of its source. Here are some tips from the experts to help you in your search:

1. Get a piece of white cardboard or use a white paper towel over cardboard and place it under your vehicle where you see the fluid stains or suspect a leak (a 2' x 4' section works best).
2. Let the cardboard sit for several hours or overnight.
3. Check the fluid color, consistency, and location with the [indicator chart](#).

Select Language ▼

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4. Search online with the make, model, and year of your car along with the leak information to narrow the possibilities and help determine the issue.
5. Take your vehicle to a mechanic and provide the information you have. For example: "I think I have a transmission leak based on the color, location, and consistency of the fluid I found under my car."

## **Identifying vehicle fluids by color, consistency, and location**

### **Brown to black with thick consistency = Oil**

Check to find exactly where the oil is coming from (could be engine, sump, filter, driveshafts or gearbox) and try to trace all leaks to their source (often oil will pool in one area but will originate from above). Clear away any dirt and grime to determine the actual leak. Most leaks come from failed plugs, seals, or gaskets.

### **Neon green, orange, blue, or red = Antifreeze**

Usually neon blue-green in color and will be found leaking from the front of your vehicle (water pump, radiator, or thermostat housing). It often has a sweet smell.

### **Light clear brown or thick black = Brake fluid**

Will often be found leaking from around the wheels.

### **Thick reddish or clear = Power steering fluid**

Will most likely be found leaking from the pipe connections on the steering rack.

### **Reddish pink = Transmission fluid**

Often has a burnt smell. Be aware that mechanics sometimes use transmission fluid interchangeably with power steering fluid.

### **Amber color with strong fuel smell = Fuel leak**

Strong, distinctive odor will tell you if you are leaking fuel. This is very dangerous...you must take care of it right away!

## **Contact us**

### **Christi Cox**

Surface Water Program Coordinator

[Email](#)

## **Public Works**

### **Spill Hotline**

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any

# Bioswale

## WHAT DOES THAT EVEN MEAN?

A BIOSWALE IS A SHALLOW DITCH WITH GENTLY SLOPING SIDES AND VARIOUS LAYERS OF SOILS BENEATH.

A bioswale – sometimes called a vegetated ditch – slows stormwater runoff and directs it to an area where it can soak in. It achieves the same goal as a rain garden, but is usually designed to manage a larger amount of runoff. A bioswale often uses grass and plants to stabilize the soil, reduce erosion, slow the flow, and absorb runoff.



### HOW ARE BIOSWALES HELPFUL?

- Bioswales help filter out harmful pollutants like oil, fertilizer, pesticides, soap, and animal waste before they are carried to the storm system and into our streams.
- They help reduce flooding by capturing the rainwater that would otherwise pool up on ground surfaces.



### CARING FOR YOUR BIOSWALE

**Grass:** Keep the bioswale's grass thick, healthy, and mowed to three or four inches. Don't leave grass clippings in the bioswale.

**Sunlight:** If your bioswale's grass has bare spots, it may not be getting enough sunlight. Do some pruning and tree trimming to let the sunlight through.

**Standing water:** The bioswale needs to drain freely between storms. Standing water can kill the grass and other plants.

**Water flow:** Keep the water flowing evenly over the entire width of the bioswale.

**Pollution:** Keep trash and other contaminants like oil, gas, and paint far away from the bioswale.

### LEARN MORE

Visit [bothellwa.gov/bioswales](http://bothellwa.gov/bioswales) for more information about caring for your bioswale.

Learn other ways to help keep Puget Sound healthy at [pugetsoundstartshere.org](http://pugetsoundstartshere.org).



# All about bioswales

## What's a bioswale?

**A shallow ditch with gently sloping sides and various layers of soils beneath.**

A bioswale - sometimes called a vegetated ditch - slows stormwater runoff and directs it to an area where it can soak in. It achieves the same goal as a rain garden, but is usually designed to manage a larger amount of runoff. A bioswale often uses grass and plants to stabilize the soil, reduce erosion, slow the flow, and absorb runoff.

## What are the benefits?

Bioswales help filter out harmful pollutants like oil, fertilizer, pesticides, soap, and animal waste so they don't find their way into the storm system and our streams.

They reduce flooding by capturing the rainwater that would otherwise pool up on ground surfaces.

**Grassy bioswale**



## How should you care for a bioswale?

Bioswales only serve their purpose if you take care of them properly. You can [view a complete list of maintenance components for your bioswale](#), but here are the top five:

- **Grass.** Keep the bioswale's grass thick and healthy and mowed to three or four inches. Don't leave grass clippings in the bioswale.
- **Sunlight.** If your bioswale shows bare spots in its grass, it might not be getting enough sunlight. You may need to do some pruning and tree trimming to let the sunlight through.

- **Standing water.** Your bioswale should drain freely between storms. Standing water can kill the bioswale's grass and other plants.
- **Water flow.** Keep the water flowing evenly over the entire width of the bioswale.
- **Pollution.** Keep trash and other contaminants like oil, gas, and paint far away from the bioswale.

[Learn more ways you can help keep Puget Sound healthy.](#)

## Contact us

### Gunnar Rybacki

Senior Surface Water Inspector

[Email](#)

Phone: 425-806-6794

### Aaron Esterholt

Surface Water Inspector

[Email](#)

Phone: 425-806-6793

## Public Works

### Physical Address

City Hall

18415 101st Ave NE

Bothell, WA 98011

## Spill Hotline

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any storm drains or local streams.

## Bioswale resources

### Printer-friendly tip sheets

- [Basic bioswale tip sheet \(PDF\)](#)
- [Bioswale maintenance checklist \(PDF\)](#)

Select Language ▼

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## Signs of septic failure

If you notice any of these signs, you need to get your septic system serviced right away:

- Sewage is surfacing on the ground over the drainfield or septic tank.
- There is a strong sewage odor.
- Bright green, spongy grass appearing on the drainfield.
- Sewage is backing up into the house
- Fixtures inside the house are draining slowly or gurgling.

## Your system's lifespan

The average lifespan of a septic system is 15 to 40 years, but it can last even longer if properly maintained. Preventative maintenance and being SepticSmart will go a long way towards extending the life of your system.

## Maintenance and costs

Your home's septic system should be inspected every three to five years for routine maintenance, and pumped as necessary depending on the inspection's results. Maintenance typically costs from \$250 to \$500, and is much more affordable than the cost of repairing or replacing a septic system, which could cost you thousands of dollars.

## Resources for homeowners

EPA's SepticSmart Program

[www.epa.gov/septicmart](http://www.epa.gov/septicmart)

City of Bothell Surface Water

[www.bothellwa.gov/septic](http://www.bothellwa.gov/septic)

King County

[www.kingcounty.gov/depts/health/environmental-health.aspx](http://www.kingcounty.gov/depts/health/environmental-health.aspx)

Snohomish County

[www.snohomishcountywa.gov/2591/Lake-Wise-Septic-Systems](http://www.snohomishcountywa.gov/2591/Lake-Wise-Septic-Systems)

## Contact us



City of Bothell™

Surface Water Management Division

18415 101<sup>st</sup> Avenue NE

Bothell, WA 98011

425-806-6800

[www.bothellwa.gov/surfacewater](http://www.bothellwa.gov/surfacewater)

# CARING FOR YOUR SEPTIC SYSTEM

...and avoiding  
costly repairs!

A helpful guide for homeowners



Courtesy of City of Bothell

# Five simple ways to be SepticSmart! Steps to protect your home, health, environment, and property value.

## Protect it and inspect it

### DO:

- Have your system inspected every three years by a licensed contractor and have the tank pumped, when necessary, about every three to five years.

## Think at the sink

Certain household items can either clog your system or kill the microbes that treat your wastewater.

### DON'T:

- Pour cooking grease or oil down the sink or toilet.
- Rinse coffee grounds into the sink.
- Pour household chemicals, gas, oil, pesticides, antifreeze, or paint down the sink or toilet.

### DO:

- Eliminate or limit the use of a garbage disposal.
- Properly dispose of coffee grounds and food.
- Put grease in a container to harden before throwing it in the trash.

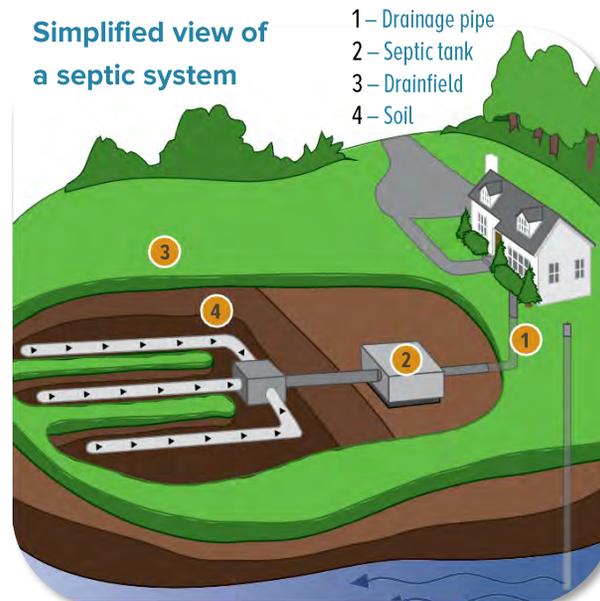
## Shield your field

### DON'T:

- Park or drive on your drainfield. The weight can damage the drain lines.
- Plant trees or shrubs too close to your drainfield. Roots can grow into your system and clog it.

### DO:

- Consult a septic service professional to advise you of the proper distance for planting trees and shrubs, depending on your septic tank location.



## Don't overload the commode

### DON'T:

- Flush non-degradable products or chemicals, like feminine hygiene products, condoms, dental floss, diapers, cigarette butts, cat litter, paper towels, pharmaceuticals, or baby wipes (including “flushable” wipes).

### DO:

- Dispose of these items in the trash can.

## Don't strain your drain

### DON'T:

- Concentrate your water use by using your dishwasher, shower, washing machine, and toilet at the same time. All that extra water can really strain your septic system.

### DO:

- Stagger your use of water-generating appliances. This can be helpful especially if your system hasn't been pumped in a long time.
- Become more water efficient by fixing plumbing leaks and consider installing bathroom and kitchen faucet aerators and water-efficient products.

# CARING FOR YOUR SEPTIC SYSTEM

## Maintenance Dos & Don'ts

### DO



#### KEEP ACCURATE RECORDS

You should keep any as-builts, repair documentation, and a maintenance record of septic inspection and pumping.



#### KEEP BACTERIA WORKING

Living organisms in your septic system and drain field make the system work. You'll kill these essential organisms by using too much chlorine, antibacterial soap, disinfectants, acids, lye, medicines, pesticides, and paint. Dispose of these items at a household hazardous waste facility.



#### COMPOST FOOD WASTE, FATS, AND OILS

Limit the amount of fats, oils, and food waste entering your system. Solids require you to pump your system more frequently. Fats and oils clog your pipes and increase the amount of scum in your system. Food waste can't break down properly and will clog your drain field. Compost your food waste instead.



#### MINIMIZE RAINWATER RUNOFF

Divert your downspouts away from your septic tank and drain field.



#### SCHEDULE MAINTENANCE REGULARLY

Your system won't function properly without regular maintenance and pumping. Pumping is a fraction of the cost of replacing your whole system. Schedule a maintenance check every 1 to 3 years, depending on what type of system you have.

### DON'T



#### USE UNNECESSARY ADDITIVES

Research indicates that additives don't provide any real value for your system.



#### IGNORE WARNING SIGNS

Signs include pipes draining slowly or gurgling, sewage smell, water backing up in sinks, showers, or basements, and increased standing or soggy water over your drain field.



#### FLUSH THINGS THAT WON'T DEGRADE

Coffee grounds, diapers, bones, tampons, napkins, paper towels, cigarette butts, floss, and any kind of packaging should always go in the trash, not your toilet.



#### DAMAGE YOUR DRAIN FIELD

Don't plant large trees over your drain pipe system, and never drive over your drain field.

Septic drain field pipes



# Septic Systems

## Septic system basics

Most septic systems are a simple design with a two compartment tank and drain field. The septic tank is a watertight box, usually made of concrete or fiberglass, with an inlet and outlet pipe. The septic tank treats the wastewater by holding it in the tank long enough for solids and liquids to separate. [Learn more about how septic systems work.](#)



## Sludge and scum

Solids lighter than water (such as fats, oils, and grease) float to the top forming a layer of scum. Solids heavier than water settle at the bottom of the tank forming a layer of sludge. The layers of sludge and scum remain in the septic tank where bacteria found naturally in the wastewater work to break the solids down. The sludge and scum that can't be broken down are retained in the tank until it is pumped.

## Standard drain field

A standard drain field is a series of trenches or a bed lined with gravel or coarse sand and buried 1' - 3' below the ground's surface. Perforated pipes or drain tiles run through the trenches to distribute the wastewater. The drain field treats the wastewater by allowing it to slowly trickle from the pipes out into the gravel and down through the soil.

## Caring for your septic system

There are many [ways to extend the life and functionality of your septic system.](#)

Select Language ▼

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## Have your septic system inspected

Your septic system needs an annual inspection and needs to be pumped at least every three years, or more frequently depending on what type of system you have. [Search for a septic system professional in your area.](#)

## Be smart when you hire a septic contractor

Check out the [Labor & Industries website](#) to learn how to "hire smart" and protect your home in the process.

## Get a copy of your septic system as-built

Health departments often have septic system as-builts stored in a public database. Check your county's health department to see if yours is available.

- [King County Public Health](#)
- [Snohomish Health District](#)

Looking for other septic-related records? Please submit a [public records request](#).

## Learn how to be SepticSmart

Check out EPA's "Dos and Don'ts" of your septic system to protect your home, health, environment, and property value at [www.epa.gov/septicSMART](http://www.epa.gov/septicSMART).

## Printable documents

- [L&I's "Hire Smart" worksheet \(PDF\)](#)
- [Septic system maintenance brochure \(PDF\)](#)

## Septic Care Dos and Don'ts

# CARING FOR YOUR SEPTIC SYSTEM

## Maintenance Dos & Don'ts

DO

DON'T

Select Language ▼

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Living organisms in your septic system and drain field make the system work. You'll kill these essential organisms by using too much chlorine, antibacterial soap, disinfectants, acids, lye, medicines, pesticides, and paint. Dispose of these items at a household hazardous waste facility.



### COMPOST FOOD WASTE, FATS, AND OILS

Limit the amount of fats, oils, and food waste entering your system. Solids require you to pump your system more frequently. Fats and oils clog your pipes and increase the amount of scum in your system. Food waste can't break down properly and will clog your drain field. Compost your food waste instead.



### MINIMIZE RAINWATER RUNOFF

Divert your downspouts away from your septic tank and drain field.



### USE UNNECESSARY ADDITIVES

Research indicates that additives don't provide any real value for your system.



### IGNORE WARNING SIGNS

Signs include pipes draining slowly or gurgling, sewage smell, water backing up in sinks, showers, or basements, and increased standing or soggy water over your drain field.



### FLUSH THINGS THAT WON'T DEGRADE

Coffee grounds, diapers, bones, tampons, napkins, paper towels, cigarette butts, floss, and any kind of packaging should always go in the trash, not your toilet.



### DAMAGE YOUR DRAIN FIELD

Don't plant large trees over your drain pipe system, and never drive over your drain field.

## SCHEDULE MAINTENANCE REGULARLY

Your system won't function properly without regular maintenance and pumping. Pumping is a fraction of the cost of replacing your whole system. Schedule a maintenance check every 1 to 3 years, depending on what type of system you have.



[www.bothellwa.gov/septic](http://www.bothellwa.gov/septic)

### Questions about connecting to sewer?

Contact our [Development Review Engineer](#).

### Questions about maintaining your system?

Contact our [Surface Water Program Coordinator](#).

Select Language ▼

# How your septic system works

Septic systems are underground wastewater treatment structures, commonly used in rural areas without centralized sewer systems. They use a combination of nature and proven technology to treat wastewater from household plumbing produced by bathrooms, kitchen drains, and laundry.

A typical septic system consists of a **septic tank** and a **drainfield**, or soil absorption field.

The septic tank digests organic matter and separates floatable matter (e.g., oils and grease) and solids from the wastewater. Soil-based systems discharge the liquid (known as effluent) from the septic tank into a series of perforated pipes buried in a leach field, leaching chambers, or other special units designed to slowly release the effluent into the soil or surface water.

Alternative systems use pumps or gravity to help septic tank effluent trickle through sand, organic matter (e.g., peat and sawdust), constructed wetlands, or other media to remove or neutralize pollutants like disease-causing pathogens, nitrogen, phosphorus, and other contaminants. Some alternative systems are designed to evaporate wastewater or disinfect it before it is discharged to the soil or surface waters.

## Specifically, this is how a typical septic system works

1. All water runs out of your house from one main drainage pipe into a septic tank.
2. The septic tank is a buried, water-tight container usually made of concrete, fiberglass, or polyethylene. Its job is to hold the wastewater long enough to allow solids to settle down to the bottom forming sludge, while the oil and grease floats to the top as scum. Compartments and a T-shaped outlet prevent the sludge and scum from leaving the tank and traveling into the drainfield area.
3. The liquid wastewater (effluent) then exits the tank into the drainfield.
4. The drainfield is a shallow, covered, excavation made in unsaturated soil. Pretreated wastewater is discharged through piping onto porous surfaces that allow wastewater to filter through the soil. The soil accepts, treats, and disperses... wastewater as it percolates through the soil, ultimately discharging to

Select Language ▼

groundwater. If the drainfield is overloaded with too much liquid, it will flood, causing sewage to flow to the ground surface or create backups in toilets and sinks.

5. Finally, the wastewater percolates into the soil, naturally removing harmful coliform bacteria, viruses and nutrients. Coliform bacteria is a group of bacteria predominantly inhabiting the intestines of humans or other warm-blooded animals. It is an indicator of human fecal contamination.

*Information from United States Environmental Protection Agency website, [www.epa.gov/septic](http://www.epa.gov/septic)*

[Learn how to care for your septic system.](#)

## Ten essential tips about caring for your septic system

1. **Conserve water.** The more wastewater you create, the more your soil must treat and dispose. Here are some ways to cut back on your water use:

- Use water-saving devices
- Repair leaky faucets and plumbing fixtures
- Reduce toilet reservoir volume or flow
- Take shorter showers
- Take baths with a partially filled tub
- Wash only full loads of dishes and laundry

2. **Keep accurate records.** Know where your septic tank system is and keep a diagram of its location. Your local health department may be able to provide you with records of its size and location. You should also keep a record of the system's maintenance. These records are helpful if problems occur, and they will be valuable to your home's next owner.

3. **Inspect your system once each year.** Check the sludge and scum levels inside your septic tank to be sure the layers of solids are not within the "early warning" levels. Your tank should also be checked to see if the baffles or tees are still in good condition. Inspect the drainfield periodically for odors, wet spots, or surfacing sewage. If your drainfield has inspection pipes, check them to see if there is a liquid level continually over six inches. This could be an early indication of a problem.

4. **Pump out your septic tank when needed.** Don't wait until you have a problem. Routine pumping can prevent failures, such as clogging of the drainfield and sewage backing up into your home. Using a garbage disposal increases the amount of solids entering the septic tank and requires more frequent pumping.

5. **Never flush harmful materials into the septic tank.** Grease, cooking fats and oils, newspaper, paper towels, rags, coffee grounds, pads and tampons, and cigarettes cannot easily decompose in your tank. Chemicals like

solvents, oils, paint, and pesticides are harmful to the system's proper operation and may pollute the groundwater. Septic tank additives don't improve the tank's performance, and they don't reduce the need for pumping. Learn how to dispose of hazardous household waste properly at [hazwastehelp.org](http://hazwastehelp.org).

**6. Keep all runoff away from your system.** Water from surfaces like roofs, driveways, and patios should be diverted away from your septic tank and drainfield area. Soil over your system should be slightly mounded to help surface water runoff.

**7. Protect your system from damage.** Keep vehicles, heavy equipment, livestock, and other heavy items off your drainfield. The pressure can compact the soil or damage your pipes. Before you plant a garden, construct a shed, or install a pool, check on the location of your system so you don't build on top of or near it.

**8. Landscape your system properly.** Don't place impermeable materials over your drainfield. Materials like concrete and plastic reduce evaporation and the supply of oxygen your soil needs for proper effluent treatment. They can also make it difficult to get to your system for any pumping, inspection, or repair. Grass is the best cover for your system.

**9. Never enter any septic tank.** Poisonous gases or the lack of oxygen can be fatal. Any work to the tank should be done from the outside.

**10. Check with your local health department for help with system problems.** Although some malfunctions may require complete drainfield replacement, many problems can be corrected with a minimum amount of cost or effort.

- [King County Public Health](#): 206-477-8050
- [Snohomish Health District](#): 425-339-5250

## Don't ignore warning signs

Here are some signs that your septic system may be failing:

- Odors, surfacing sewage, wet spots or lush vegetation growth in the drainfield area
- Plumbing or septic tank backups
- Slow draining fixtures
- Gurgling sounds in the plumbing system

## Is your system failing?

[Learn what to do if your septic system fails.](#)

# CARING FOR YOUR SEPTIC SYSTEM

# Don't feed those birds!

## HERE'S WHY

### Why shouldn't you feed the birds?

Short answer: [Because it's bad for them.](#)

Bread and similar products like crackers, chips, donuts and popcorn offer little nutritional value for ducks, geese, and other birds. Bread is like junk food for the birds, and too much of it can lead to excessive weight and malnutrition, as well as a host of other problems.

### What happens when you feed the birds?

Feeding ducks, geese, and other birds at all leads to lots of problems for the birds and for us.

**Malnutrition:** When we feed birds human foods, their babies don't get adequate nutrition for proper growth and will not learn to forage for natural foods.

**Overcrowding:** When easy food is abundant, birds lay more eggs. This makes it hard for them to find healthy food sources and it increases the likelihood of territorial aggression.

**Pollution:** A large amount of bird waste creates problems on the ground and in our water. We have discovered high levels of bird fecal matter in our streams, which makes contact with the water a health risk for humans.

**Loss of natural behavior:** When birds become accustomed to getting food from us, they lose their natural fear of humans and can become aggressive. Have you ever gotten a little too close to a Canadian goose?

### Learn more

Visit [bothellwa.gov/birdfeeding](http://bothellwa.gov/birdfeeding) for more about birds. Check out [bothellwa.gov/pugetsound](http://bothellwa.gov/pugetsound) for ways you can Help keep Puget Sound healthy.



**Disease:** When you feed the birds, you increase the spread of disease in three ways: 1) by causing birds to come in closer contact with us than they normally would, 2) by creating higher levels of bacteria-infested fecal matter that cause a number of diseases, and 3) subjecting entire waterfowl flocks to a fatal lung infection that can happen when they eat moldy bread.

**Unwanted pests:** Food attracts unwelcome pests like mice, rats, and insects. These pests harbor even more diseases that are health risks for humans.

**Habitat degradation:** Providing food attracts large groups of birds beyond what the natural ecosystem can support. These large groups can wreak havoc on natural areas causing erosion, increased fecal matter on the ground and in our water, and a nasty mess for others sharing the space.



# Please don't feed us

...unless you're giving us some tasty worms, roots, beetles, dragonflies, plants, crustaceans, or moths.



Feeding us the same stuff you like to eat does more harm than good. Here's what happens when we eat your food, especially bread:

- It's not nutritious for us.
- It causes overcrowding.
- It attracts pests.
- It spreads disease.
- It pollutes our water.
- It's unhealthy for our ducklings.
- It changes our natural behavior.
- It delays our migration.
- It destroys our habitat.
- It can make those geese even more territorial!



City of Bothell™  
[www.bothellwa.gov/ducks](http://www.bothellwa.gov/ducks)

# Don't Feed the Birds



## Why shouldn't you feed the birds?

### Short answer: Because it's bad for them.

Bread and similar products such as crackers, chips, donuts and popcorn offer little nutritional value for ducks, geese, and other birds. Bread is like junk food for the birds, and too much of it can lead to excessive weight and malnutrition, as well as a host of other problems.

## What happens when you feed the birds?

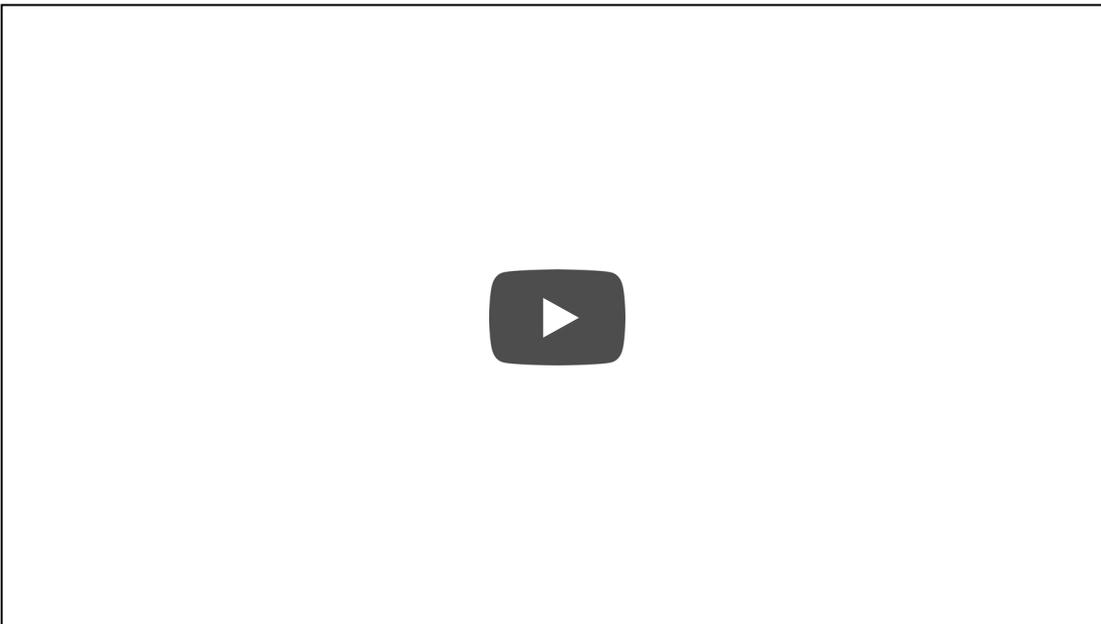
Feeding ducks, geese, and other birds at all can lead to lots of problems for the birds and for us.

- **Malnutrition:** When birds are fed regularly, babies do not receive adequate nutrition for proper growth and will not learn to forage for natural foods.
- **Overcrowding:** Where easy food is abundant, birds will lay more eggs making it difficult for them to seek healthy food sources and increases the likelihood of territorial aggression.

Select Language ▼

Powered by Google Translate

- **Pollution:** When birds are unnaturally gathered in a feeding area, their waste creates problems on the ground in our water. Two watersheds in Bothell are currently listed as in trouble because of the amount of fecal matter in the streams. This bacteria makes contact with the water a human health risk.
- **Disease:** Feeding birds can increase the spread of disease in three ways: by causing them to come in closer contact than they would normally, by causing increased defecation that harbors bacteria that is responsible for numerous diseases, and moldy bread can cause a fatal lung infection that can decimate entire waterfowl flocks.
- **Unwanted pests:** Food attracts unwelcome pests like mice, rats and insects. These pests harbor additional diseases that can be dangerous to humans.
- **Loss of natural behavior:** When birds become accustomed to handouts, they lose their natural fear of humans and can become aggressive.
- **Habitat degradation:** Providing food attracts concentrations of birds beyond what the natural ecosystem can support. Large concentrations can de-vegetate natural areas causing erosion, increase fecal matter in ground and surface water, and an unsightly mess for others using the space.



## Contact us

### Christi Cox

Surface Water Program Coordinator

[Email](#)

### Spill Hotline

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any storm drains or local streams.

Select Language ▼

Powered by [Google Translate](#)

**Q: What if I feed the ducks something healthier than bread?**

**A:** *In their natural habitat, ducks don't need any food from humans, whether it's bread or something healthier. They get everything they need from the environment around them.*

*Supplementing their diet with anything at all leads to overcrowding, pollution, malnutrition, disease, and loss of natural behavior.*

## **Printable PDF**

- [Reasons to NOT feed the birds \(PDF\)](#)

# Do you know that Hazardous Waste cannot go in the trash?

 Local Hazardous Waste  
Management Program  
in King County, Washington  
130 Nickerson Street, Suite 100  
Seattle, WA 98109

Alternate Formats Available  
206-263-1650 • TTY Relay: 711

These products say **CAUTION, WARNING, DANGER, FLAMMABLE, TOXIC** or **POISON** on the label and can be harmful to humans, wildlife, and the environment if not disposed of safely.

**For FREE, safe disposal, bring them to the drop-off site and/or to the Wastemobile!**

## What to bring

- ✓ Antifreeze
- ✓ Batteries (lead acid, alkaline, button, rechargeable)
- ✓ Cleaners
- ✓ Fluorescent lights
- ✓ Gasoline
- ✓ Mercury products
- ✓ Motor oil
- ✓ Oil-based paint
- ✓ Paint thinner or other solvents
- ✓ Pesticides
- ✓ Propane tanks



## What NOT to bring

- x Asbestos
- x Appliances
- x Computers
- x Empty containers
- x Explosives
- x Latex paint
- x Medicines
- x Sharps
- x Tires
- x TVs



## Questions or more information?

Visit [www.hazwastehelp.org](http://www.hazwastehelp.org)

Or call 206-296-4692

Monday-Friday, except holidays

Where can I  
drop off my  
Hazardous Waste?



## Bring your Hazardous Waste to the drop-off site and/or to the Wastemobile!

### FACTORIA

(located at the transfer station)  
13800 SE 32nd St  
Bellevue, WA 98005  
Open: Tues-Fri 8 a.m.-4 p.m.  
Sat-Sun 9 a.m.-5 p.m.

### NORTH SEATTLE

12550 Stone Ave N  
Seattle, WA 98133  
Open: Sun, Mon, Tues  
9:30 a.m.-4:30 p.m.

### SOUTH SEATTLE

(located next to the transfer station)  
8105 5th Ave S  
Seattle, WA 98108  
Open: Thu, Fri, Sat  
9:30 a.m.-4:30 p.m.

### BOTHELL - 6 DATES

Round #1: February 23 to 25  
Round #2: May 18 to 20  
Round #3: June 22 to 24  
Round #4: July 27 to 29  
Round #5: September 14 to 16  
Round #6: October 19 to 21  
The Seattle Times Building  
19200 120th Ave NE  
Bothell, WA 98011

### KENT - 3 DATES

Round #1: March 9 to 11  
Round #2: June 8 to 10  
Round #3: September 7 to 9  
Puget Sound Fire - Station #75  
15635 SE 272nd St  
Kent, WA 98042

### REDMOND - 3 DATES

Round #1: April 6 to 8  
Round #2: July 20 to 22  
Round #3: October 5 to 7  
The Home Depot  
17777 NE 76th St  
Redmond, WA 98052

### VASHON

April 13 to 15  
Tjomsland Gravel Pit  
17001 107th Ave SW  
Vashon, WA 98070

### DES MOINES

April 20 to 22  
Des Moines Marina  
22307 Dock St  
Des Moines, WA 98198

### KIRKLAND

May 11 to 13  
Northwest University  
5520 108th Ave NE  
Kirkland, WA 98033

### ENUMCLAW

June 1 to 3  
Enumclaw Expo Center  
45224 284th Ave SE  
Enumclaw, WA 98022

### SNOQUALMIE

July 6 to 8  
MSHS Freshman Campus  
9200 Railroad Ave  
Snoqualmie, WA 98065

### SAMMAMISH

August 10 to 12  
Eastlake High School  
400 228th Ave NE  
Sammamish, WA 98074

### CARNATION/DUVAL

August 17 to 19  
Tolt MacDonald Park  
Boeing Mariners Care Field  
Carnation, WA 98014

### BURIEN

September 21 to 23  
Fred Meyer  
14300 1st Ave S  
Burien, WA 98168

### RENTON

October 12 to 14  
McLendon Hardware  
440 Rainier Ave S  
Renton, WA 98057

### AUBURN Wastemobile

Saturdays & Sundays,  
10 a.m.-5 p.m.  
The Outlet Collection\*\*  
1101 Outlet Collection Way  
Auburn, WA 98001

\*\*Located at the northwest  
corner of the mall, in  
the loading dock, near  
Nordstrom Rack

Closed: November 24 & 25,  
December 29 & 30, 2018

Drop-off site

Wastemobile

What can I  
bring?




Wastemobile  
customers  
must remain in  
their vehicles

Some locations may be subject to change

# TAKE THE PLEDGE

#gostrawless

More than 500,000,000 disposable plastic straws are used once and tossed every single day. These straws are not recycled, so they end up in landfills, on streets, in streams, and in oceans.

**You can help. Take the pledge and make a difference!**

***For the next month, I pledge to not use any single-use plastic straws. With my pledge, I'm helping to eliminate plastic pollution that would otherwise end up in our oceans and waterways.***

Your signature: \_\_\_\_\_

Printed name: \_\_\_\_\_

Dept: \_\_\_\_\_ Date: April 20, 2018



# SKIP THE STRAW

# ONLY RAIN DOWN STORM DRAINS

Indoor drains carry wastewater to the sewer for treatment

Outside drains, called storm drains, carry rain directly to local streams and lakes **without treatment**

## Protect water quality for future generations

- Use a commercial car wash
- Fix vehicle leaks
- Scoop pet waste and place it in the trash
- Avoid harmful pesticides and fertilizers



Take the  
Puget Sound Starts Here  
pledge  
today!

As our thanks, you'll get a

**CHINOOK BOOK MOBILE  
COUPON ACCESS CODE**

Smartphone required to use mobile  
coupons on the Chinook Book app

**Puget Sound**   
**Starts Here**



City of Bothell™



## Puget Sound Starts Here Pledge

City of Bothell

Thanks for pledging to protect Bothell's waterways and Puget Sound!

Before you begin, here's a bit of background about stormwater.

Most of the storm drains in Bothell empty directly into the nearest creek, stream, river, or wetland. So whenever it rains, anything we've left on the ground like vehicle oil, dog poop, and even the stuff we can't see like yard chemicals, makes its way to our local waters. This survey teaches you simple ways you can help protect the water around you.

This is a picture of a storm drain. Water flows into it and travels -- untreated -- to our local waterways.



Hi! I'm a storm drain.

Now...let's get started!



## Puget Sound Starts Here Pledge

City of Bothell

Enough about me, let's talk about you

**What's your name?**

First

Last

**\* Are you a Bothell resident?**

Yes

No



**Puget Sound Starts Here Pledge**

City of Bothell

Use a commercial car wash

**By taking your car to a commercial car wash or washing your vehicle on your lawn, you're preventing heavy metals, oils, and soap from entering Bothell's waterways. Thanks for promising to wash your car the right way!**



**\* I promise to wash my car the right way.**

I will take my car to a commercial car wash every time.  I don't have a car.

If I can't make it to a car wash, I will wash my car on the lawn and make sure wash water doesn't overflow into ditches, streets, or storm drains.  I can't commit to this.



## Puget Sound Starts Here Pledge

City of Bothell

Scoop the poop, bag it, and put it in the trash

**By scooping your dog's poop, you're helping reduce health risks to your family and neighbors while keeping your yard clean, and you're preventing disease-causing organisms from entering Bothell's waterways. Thanks for promising to scoop the poop!**



**\* I promise to scoop my pet's poop -- even in my own backyard -- bag it, and put it in the trash.**

I promise to do this.

I can't commit to this.

I don't have a dog.

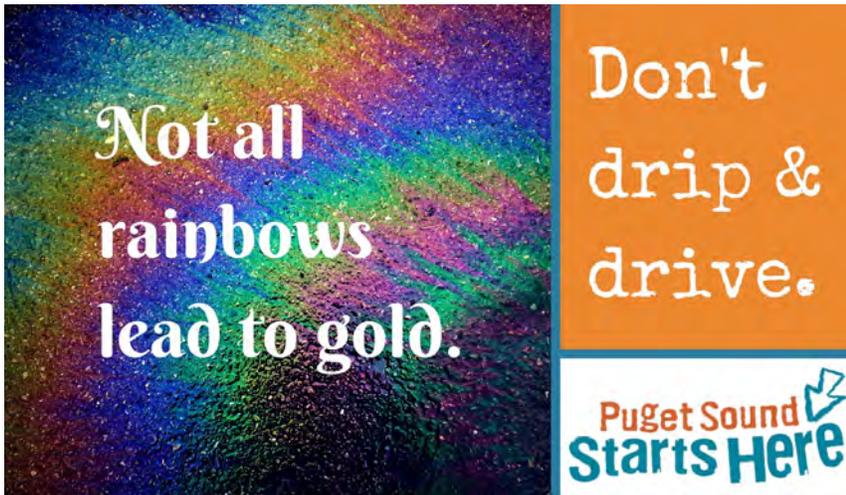


## Puget Sound Starts Here Pledge

City of Bothell

Check for vehicle leaks

By checking your vehicle for leaks, you're keeping oil, gas, and other harmful fluids from entering Bothell's waterways. Thanks for promising to check your vehicle for leaks!



**\* I promise to check my vehicle for leaks at least once a year and fix any leaks I find as soon as I can.**

- I promise to do this.
- I can't commit to this.
- I don't have a car.



**Puget Sound Starts Here Pledge**

City of Bothell

Don't use harmful chemicals in your yard

**When you use less pesticides in your yard, or no pesticides at all, you're keeping kids, pets, and our community safer while also reducing the amount of chemicals entering Bothell's waterways. Thanks for promising to think twice before using pesticides!**



**\* I promise to use non-chemical choices for preventing weeds and bugs whenever possible, and to use less pesticides if I do use them.**

- I promise not to use pesticides.
- I don't have a yard or garden.
- I promise to use less pesticides.
- I can't commit to this.



**Puget Sound Starts Here Pledge**

City of Bothell

Teach others about storm drains

As we said at the beginning of this survey, most storm drains in Bothell lead straight to the nearest waterbody. This means that whatever goes on the ground -- like car wash soap, pet waste, oil, and yard chemicals -- eventually gets washed by the rain into Bothell's waterways.



**\* I promise to tell at least one other person about storm drains and their direct connection with our local waterways.**

- I promise to do this.
- I can't commit to this.



**Puget Sound Starts Here Pledge**

City of Bothell

Would you like a Chinook Book?

In exchange for your honest answers to the following questions, we're offering you a Chinook Book mobile coupon access code. Chinook Book gives you 12 months of access through your smartphone to nearly 700 coupons you can use at environmentally-friendly businesses throughout Puget Sound.

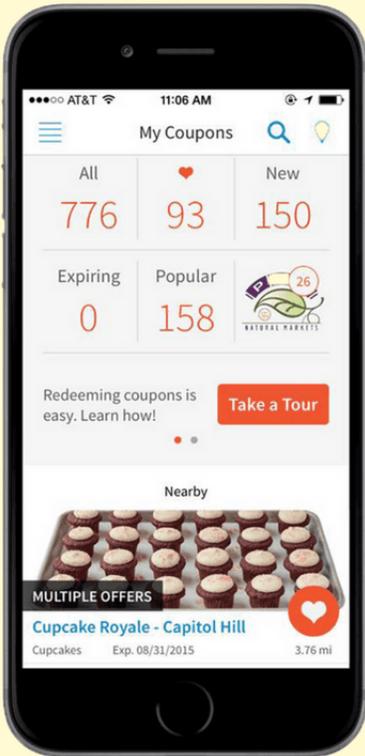
### About the Chinook Book mobile coupon access code

*In order to use the coupons, you must have a smartphone that meets these operating system requirements: iOS 8.0 and higher or Android 4.0 and higher.*

**\* Would you like to receive a Chinook Book mobile coupon access code as our thanks for taking this pledge? The code gives you access to over 700 mobile coupons for environmentally-friendly businesses throughout Puget Sound.**

- Yes, please! I have a smartphone and would like to receive my Chinook Book mobile coupon access code by email.
- No thanks, I'm okay just taking the pledge.

### Chinook Book mobile coupon app



**A Chinook Book** mobile coupon app gives you 12 months of access to nearly 700 coupons you can use at green businesses throughout Puget Sound.

Smartphone required to download app and use coupons.



## Puget Sound Starts Here Pledge

City of Bothell

How to receive your Chinook Book mobile coupon access code

**Remember, you need a smartphone to be able to download and use the Chinook Book mobile coupon app.**

Please enter your email address in order to receive your free Chinook Book mobile coupon access code. **WE WILL NOT USE YOUR INFORMATION FOR ANY PURPOSE OUTSIDE OF THIS PLEDGE.**



## Puget Sound Starts Here Pledge

City of Bothell

Follow-up survey in six months

In order to measure the effectiveness of your pledge, we would like to send you a follow-up survey in about six months. If this is okay with you, please enter your email address below.



## Puget Sound Starts Here Pledge

City of Bothell

Voluntary demographics

**You're almost done! Just a few more questions.**

**We use this demographic information to help measure how well we're providing equitable services. This information is completely anonymous and confidential, and your participation is voluntary.**

**\* What is your age range?**

- 18-34
- 35-54
- 55-64
- 65 or older
- Decline to answer

**\* What is your race or ethnicity? Check all that apply.**

- African American or Black
- Asian
- Native Hawaiian or Pacific Islander
- Hispanic or Latino
- American Indian or Alaska Native
- Other (specify)
- White/Caucasian
- Two or more races
- Don't know
- Decline to answer

**\* What is the primary language spoken at your house?**

- English
- Spanish
- Chinese
- Korean
- Vietnamese
- Other (specify)
- Other Asian language
- Russian
- Any European language
- Arabic
- Decline to answer

**\* How many people live in your family/household, including you?**

- 1
- 2
- 3
- 4
- 5
- 6 or more
- Decline to answer

**\* What is your home zip code?**

**\* Do you own or rent your place of residence?**

- Own
- Rent

**\* What is your gender identity?**

- Female
- Male
- Other (please specify)
- Transgender
- Decline to answer

**\* What is the highest degree or level of school you've completed?**

- Some high school
- High school graduate or GED
- Some college or technical school or AA degree
- Four-year college degree
- Post-graduate work or degree
- Decline to answer

**\* What is your annual household income?**

- Below \$25,000
- \$25,000 - \$49,999
- \$50,000 - \$74,999
- \$75,000 - \$99,999
- \$100,000 - \$124,999
- \$125,000 - \$149,999
- \$150,000 or more
- Don't know
- Decline to answer



**Puget Sound Starts Here Pledge**

City of Bothell

Thank you, thank you, thank you!

Thank you for taking the pledge to protect Bothell's waterways and Puget Sound! If you requested a Chinook Book, expect to see your mobile coupon access code in your email inbox within 7 - 10 business days.

You may not think your small actions have a big impact, but they really do! Millions of pounds of toxic pollutants enter Puget Sound each year, mainly from stormwater runoff coming from our neighborhoods. More than four million people call Puget Sound "home," so if we each reduce our pollution contribution by 1/4 of a pound, that would make a million-pound dent in the pollution problem!

Visit [www.bothellwa.gov/pugetsound](http://www.bothellwa.gov/pugetsound) for more ways you can help keep our waters healthy.

**Puget Sound**   
**Starts Here**

# Sammy the Steelhead's race to the finish line!

## Sponsor a fish. Save a species.

### What's the problem?

Predators, disease, pollution, oh my! It's tough in Puget Sound for steelhead.

Something fishy is going on. Young steelhead are having a hard time surviving the trek from their freshwater homes to the open ocean. But [Long Live the Kings](#) is honing in on the problem and providing new hope for these unseen heroes. Using special high-tech tracking devices, they can discover where a steelhead's voyage is cut short and what might be leading to their untimely demise.

### How we helped

In 2018, Team BothellCool sponsored **Sammy the Steelhead** through [Survive the Sound](#). From May 7 - 18, we got to watch Sammy in his 12-day migratory race to survive Puget Sound, and we discovered what obstacles he and his friends faced along the way.

Sponsorship proceeds helped [Long Live the Kings](#) in their efforts to restore wild salmon and steelhead. Come along on the journey with us again in 2019!



### How did Sammy do?

Check out The Sammy Blog to find out how Sammy and his friends did in 2018's race.

### Sammy the Steelhead



Learn more about Sammy and all his friends on [Survive the Sound's website](#).

Select Language ▼

Powered by [Google Translate](#)

## Contact us

### Christi Cox

Surface Water Program Coordinator

[Email](#)

Phone: 425-806-6790

## Public Works

### Physical Address

City Hall

18415 101st Ave NE

Bothell, WA 98011

## Spill Hotline

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any storm drains or local streams.

Puget Sound   
Starts Here

Select Language ▼

# The Sammy Blog

## 2018 Survive the Sound Migration: May 7 - 18

This was the place to learn about Sammy and his friends' journey as they tried to make it to the finish line! Statistically, only 20% of juvenile salmon survive this migration. There were 48 fish in this race...who was *your* pick to win?



## May 18

### All good things must come to an end

Today is the last day of the Survive the Sound Migration! Out of 48 juvenile steelhead, 14 made it to the Pacific Ocean. Team BothellCool's fish, Sammy, landed 38th in the rankings. (We're still getting over it.) We learned so much about steelhead during this 12-day journey. We'll follow a new set of young steelhead next May when another migration begins. We hope you'll join us again!



- Coder

Special shout out to our fish, Sammy, who finished in 38th place. You may not have won the race, but you certainly won our hearts. **#SurviveTheSound #LongLiveTheKings**

Migration Day 12/12

Surviving Fish 14/48 - 29%

## Overall Standings

### Fish Ranking

		Place	Distance to ocean	Status
	Stormy	12	00 miles	Alive
	Anthony's King Tony	13	00 miles	Alive
	Coder	14	00 miles	Alive

## May 17

### Why are some steelhead easy targets?

One of the reasons steelhead have a hard time is because some of the waters they swim through are contaminated and plagued with disease. Just like people, when fish are unhealthy, they slow down. This makes them an easy meal for predators. Remember...anything that goes down a storm drain in Bothell eventually makes its way – untreated – to Puget Sound. Nothing but rain down the drain, please!



**Stormy**

Status: **Alive**  
 Speed: **0.68 mph**  
 Distance: **143.49 miles**

16 May 2015

**"Fast break!"**

Did you know the marine survival of steelhead and Chinook and coho salmon has declined throughout the Salish Sea, including Puget Sound and the Canadian waters of the Strait of Georgia to the north? This is why LLTK's Salish Sea Marine Survival Project is an international endeavor. We work closely with the Pacific Salmon Foundation, our Canadian nonprofit counterpart on this project, to align work in the Strait of Georgia and Puget Sound as we work to address this critical issue.

**So close...yet so far away!**

**SURVIVE the SOUND GO FISH GO!**

Select Language ▾

Powered by Google Translate

## Today's rankings

With only one day to go, it looks like Stormy could be the last fish to make it to the ocean. Last night Sushi joined her nine successful steelhead friends and celebrated her victory in the [Survive the Sound Migration!](#)

We don't want to be the ones to say it, but it's not looking too good for the remaining 10 fish. We just lost Swedish and Mackerel.

Migration Day 11/12

Surviving Fish 21/48 - 44%

## Overall Standings

Fish Ranking				
		Place	Distance to ocean	Status
	Sushi	10	00 miles	Alive
	Stormy	11	25.2 miles	Alive
	Coder	12	61.15 miles	Alive

## May 16

### Lights out for Lights Off

There are still 14 fish fighting their way to the Pacific. Unfortunately our energy-conserving steelhead, Lights Off, was so good at saving energy that he decided not to use any for rest of the [Survive the Sound Migration](#). You had a good run, buddy.

## Today's rankings

**Latest victories:** Goldie, Boom, Neptune, and Gry-Fin-Dor

**Latest casualties:** Dawg Paddle and Lights Off

**Still trying:** Stormy, Sushi, Mackerel, Sam Q.

Newsfish, Swedish, Anthony's King Tony, Speedy, Chinook Book Cherie, Rainbow, Bruce, Coder, Venti, Itchy Roe, and Danger

Two days left!



Select Language ▼

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Migration Day 10/12

Surviving Fish 23/48 - 48%

## Overall Standings

Fish Ranking				
		Place	Distance to ocean	Status
	Stormy	10	25.2 miles	Alive
	Sushi	11	35.19 miles	Alive
	Mackerel	12	80.11 miles	Alive

## May 15

### What are the odds?

If you've been following along with the Survive the Sound Migration, you know juvenile steelhead have it pretty rough during their two-week journey towards the Pacific Ocean. Over 80% of them die during their migration attempt! Out of the 48 fish that started this race on May 7, only 25 are still alive. Let's take good care of our waters to boost their chances of survival.

### Today's rankings

It looks like Neptune has a good chance of making it to the ocean with less than 14 miles to go! Overnight we lost a few more fish - Willy, Eddy Gar, and Lunch Box. Will anyone else cross the finish line by Friday?

Migration Day 9/12

Surviving Fish 25/48 - 52%

## Overall Standings

Fish Ranking				
		Place	Distance to ocean	Status
	Micro	5	00.05 miles	Alive
	Neptune	6	13.95 miles	Alive
	Stormy	7	25.2 miles	Alive

## May 14

### Remembering the fallen

Select Language ▼

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Sadly, 40% of our steely friends have become fish food. R.I.P. Sharkbait, Salmon Ella, Ocean Magic, Trigger, Lulu, Killer, Bodhi, The Swish, Coach, Fin-E-Ups, Sammy, Bubbles, Blitz, Flashy, Scifi, Puget Pounder, Jaws, Steely, Sea Slough. You guys made us proud.

### Why are so many dying?

Many of these fish are meeting their end near the Hood Canal Bridge. The bridge floats, sitting on enormous pontoons that span 83% of Hood Canal's width and extend 15 feet underwater. [Long Live the Kings](#) and their partners are working to find solutions in case these pontoons are obstructing the steelhead migration.



### Today's rankings

Congrats on making it to the Pacific Ocean, sk<sup>w</sup>awəɹ, Sergeant Snackbar, Seven-Fishy-Seven, Little Red, and Micro! Goldie and Boom are next in line with about 78 miles to go. Will they make it through the gauntlet? We hope so!

Migration Day 8/12

Surviving Fish 29/48 - 60%

## Overall Standings

Fish Ranking				
		Place	Distance to ocean	Status
	Little Red	4	00.04 miles	Alive
	Micro	5	00.05 miles	Alive
	Goldie	6	76.79 miles	Alive
	Boom	7	77.89 miles	Alive

## May 11

### What big teeth you have, Grandma!

Out of nowhere, Little Red zoomed into spot #2, following closely behind Sergeant Snackbar! Overnight we lost Jaws, Scifi, Flashy, and Salmon Ella leaving 37 fish left in the race. Can Sergeant Snackbar hold onto his lead? He's only 61 miles away from the Pacific Ocean!



## Today's rankings

Sergeant Snackbar, Little Red, and sk<sup>w</sup>awəł are our top three today. There's a pack of fish about 15 miles behind the leaders that includes Bodhi, Trigger, Killer, Speedy, Lunch Box, Chinook Book Cherie, and Fishy McFishface. It's still anyone's race!

Select Language ▼

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Migration Day 5/12

Surviving Fish 37/48 - 77%

## Overall Standings

Fish Ranking				
		Place	Distance to ocean	Status
	Sergeant SnackBar	1	61.22 miles	Alive
	Little Red	2	72.97 miles	Alive
	skʷawəɫ	3	76.94 miles	Alive

## May 10

### Putting the past behind us

Yesterday was a hard day for all of us, dealing with the overwhelming shock and grief of losing our friend Sammy so early in the race. But he's not alone. Yesterday we also had to say goodbye to Fin-E-U's, Puget Pounder, Steely, and Sea Slough. But let's transform all that sadness into some positive energy and cheer on the rest of Sammy's friends!

### Today's rankings

Sergeant SnackBar pulled ahead of Trigger, with skʷawəɫ closely following in third place. Where's Killer, you ask? He's moved back a few spots and is now in fifth place. SnackBar has a five-mile lead on Trigger, but as we know by now, anything can happen in this race!

Migration Day 4/12

Surviving Fish 41/48 - 85%

## Overall Standings

Fish Ranking				
		Place	Distance to ocean	Status
	Sergeant SnackBar	1	88.19 miles	Alive
	Trigger	2	93.44 miles	Alive
	skʷawəɫ	3	93.49 miles	Alive

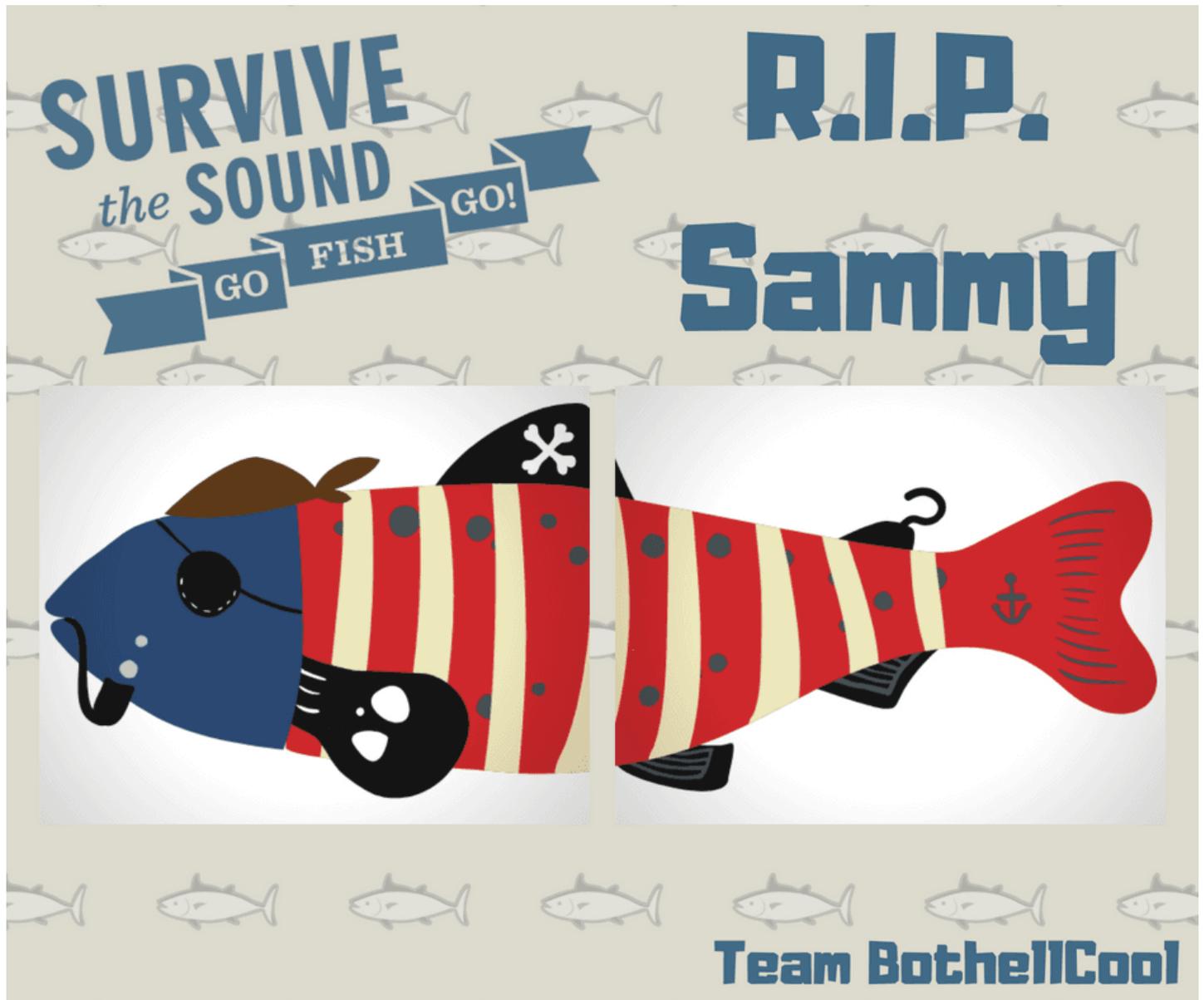
Select Language ▼

Powered by Google Translate

**May 9**

**R.I.P. Sammy**

In a tragic turn of events, Sammy's trek was cut short and he didn't survive the journey. We like to think he at least went peacefully. We'll keep following his friends until the end of the race, knowing that his fishy spirit is giving them extra strength to make it to the finish line. You made us proud, Sammy!



**Today's rankings**

Sammy and Blitz tied for 46th place in the race. So maybe our fish wasn't the winner, but he tried! His journey ended 130.52 miles away from his destination. But in more exciting news, we have a new leader! Trigger has pulled ahead of Killer by about half a mile. Will he be able to hold onto the lead? Check back tomorrow to find out!

Surviving Fish 43/48 - 90%

## Overall Standings

Fish Ranking				
		Place	Distance to ocean	Status
		--	-----	----
	Blitz	46	130.52 miles	Dead
	Sammy	46	130.52 miles	Dead
	Sea Slough	48	144.96 miles	Dead

## May 8

### Taking a little breather

Looks like Sammy is resting right now, as he hasn't covered much distance since yesterday. We know the journey can be treacherous, so we don't blame him for taking a breather. Maybe he's taking a minute to remember his buddy Lulu, who was the first casualty of this migration. RIP Lulu.

### Today's rankings

Our boy has dropped a few spots in the rankings down to #13, but we're not giving up on him! The leaderboard has Killer on top followed by Trigger and Sam Q. Newsfish. See all the rankings at [www.survivethesound.org](http://www.survivethesound.org).

Migration Day 2/12

Surviving Fish 47/48 - 98%

## Overall Standings

Fish Ranking				
		Place	Distance to ocean	Status
	Sergeant Snackbar	12	130.3 miles	Alive
	Sammy	13	130.52 miles	Alive
	Rainbow	14	130.66 miles	Alive

## May 7

### The race is on!

The race to #SurviveTheSound has begun! Team BothellCool and thousands of others across the Pacific Northwest have sponsored fish in the first ever endurance race for wild steelhead! We think our fish, Sammy, has

Select Language ▼

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what it takes to survive the trek through Puget Sound to the Pacific Ocean, and we'll be watching closely to see what challenges he encounters along the way.

We'll be reporting back at least every few days about Sammy's progress along the way. To follow along, [make sure you're connected with us on Facebook](#).

Thanks for playing along as we race to #SurviveTheSound and expand awareness about steelhead in the Salish Sea!

[Watch the race's progress here](#).

### Where's Sammy in the rankings?

Today Sammy is in a two-way tie for position 11. Yeah, that may not sound great, but he's competing against 47 other fish! He's 131 miles from the ocean, just over 20 miles behind the number one fish, Killer. We're rooting for you, Sammy!

Migration Day 1/12

Surviving Fish 48/48 - 100%

### Overall Standings

Fish Ranking				
		Place	Distance to ocean	Status
				
	Speedy	11	131.48 miles	Alive
	Sammy	11	131.48 miles	Alive
	Fishy McFishface	13	131.51 miles	Alive

### Get involved!

This program is made possible by Survive the Sound and Long Live the Kings. Learn more about what they do, then get involved!

# SURVIVE *the* SOUND



Learn more about [Survive the Sound](#).



Proceeds from Survive the Sound help [Long Live the Kings](#) restore wild salmon and steelhead, and support free classroom participation.

# Pet Waste

## WHAT'S ALL THE STINK ABOUT?



### DOG POOP IS A HEALTH RISK

It's more than just a smelly nuisance – dog poop puts kids, adults, pets, and wildlife at risk. Pet waste is full of harmful bacteria, called *fecal coliform*, that can make you sick.

### RAIN MAKES THE PROBLEM WORSE

When it rains, dog poop and fecal coliform bacteria are washed into our storm drains and streams, where the pollutants affect our water quality. Would *you* want to swim or play in that water?

### THE SCOOP ON POOP

- In just one day, a dog can produce 5 billion fecal coliform bacteria. It only takes 400 bacteria to contaminate a cup of water. That means in 24 hours, one dog can contaminate 12,500,000 cups of water. That's a LOT of water.
- Viruses, worm eggs, and bacteria in poop can live as long as one year, depending on conditions.

### WHAT TO DO WITH DOG POOP

- **Scoop it**  
in public and in your yard.
- **Bag it**  
to contain the bacteria.
- **Put it in the trash**  
and **only** the trash.

### LEARN MORE

Visit [bothellwa.gov/scoop](http://bothellwa.gov/scoop) or [pugetsoundstartshere.org](http://pugetsoundstartshere.org) for more ways to help keep Puget Sound healthy.



### BOTHELL'S SCOOPING LAW

**Not picking up after your pet is against the law!**

Per Bothell Municipal Code 6.16.011 and 8.60.240, it's illegal to leave your pet waste on public or private property. *Doing so could earn you a \$250 fine per violation.*

### IS PET WASTE A PROBLEM IN YOUR AREA?

Request a pet waste reminder sign for an area where people are leaving pet waste behind. Fill out the request at [bothellwa.gov/scoop](http://bothellwa.gov/scoop).

### You're gonna pick that up, right?



**Scoop it.**

**Bag it.**

**Put it in the trash.**



**It's the law.**  
BMC 6.16.011 & 8.60.240



# Be a City of Bothell™ Super Scooper!

I pledge to scoop the poop at home, rain or shine.

I pledge to scoop the poop on walks every time.

I pledge to scoop it, bag it, and put it in the trash.

And if I don't, I could end up paying \$250 cash! *(No joke! Check out BMC 6.16.011!)*

First name:

Last name:

Dog name(s):



**POOP  
SCOOPER**  
— BOTHELL, WA —

SCOOP IT, BAG IT, AND PUT IT IN THE TRASH!

**POOP  
SCOOPER**  
— BOTHELL, WA —

SCOOP IT, BAG IT, AND PUT IT IN THE TRASH!

SCOP THE POOP

HOME OF GOOD DOGS  
AND THEIR OWNERS

20 BOTHELL, WA 18

SCOP THE POOP

HOME OF GOOD DOGS  
AND THEIR OWNERS

20 BOTHELL, WA 18

**I Scoop.**

• SCOOP IT, BAG IT, AND PUT IT IN THE TRASH •

Bothell, WA  
ESTD. 2018

**I Scoop.**

• SCOOP IT, BAG IT, AND PUT IT IN THE TRASH •

Bothell, WA  
ESTD. 2018

SCOPPER

PROUD

I CLEAN UP AFTER MY DOG

SINCE 2018

BOTHELL, WASHINGTON  
DOGS ROCK!

SCOPPER

PROUD

I CLEAN UP AFTER MY DOG

SINCE 2018

BOTHELL, WASHINGTON  
DOGS ROCK!

SUPER SCOOPER

Bothell, WA

ESTD 2018

• SCOOP IT, BAG IT, AND PUT IT IN THE TRASH!

SUPER SCOOPER

Bothell, WA

ESTD 2018

• SCOOP IT, BAG IT, AND PUT IT IN THE TRASH!

Landfills are designed to safely handle pet waste – **parks and lawns are not.** Please scoop it, bag it, and put it in the trash.

Protect your family, your pets, and the health of our streams by scooping dog poop when on walks and from your yard.



[www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop)

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City of Bothell™

# Bothell's Super Scooper Pledge

**By pledging to be a Super Scooper, you're promising to help keep Bothell's streams, kids, pets, and families healthy. Thanks for doing your part and being a responsible dog owner!**

**If you live in Bothell's city limits, after you take the pledge you can request a "We Scoop" sticker for your trash can.**

- \* 1. I pledge to scoop the poop at home, rain or shine.  
I pledge to scoop the poop on walks every time.  
I pledge to scoop it, bag it, and put it in the trash.  
And if I don't, I could end up paying \$250 cash.**

**(Yes, really! Check [Bothell Municipal Code 6.16.011!](#))**

First name:

Last name:

Dog name(s):

- \* 2. Are you a City of Bothell resident?**

Yes

No

Be a good friend and a good dog owner!



City of Bothell™

## Bothell's Super Scooper Pledge

Thanks!

Thanks for taking the Super Scooper Pledge!

If you live in Bothell's city limits, we'd like to say "thanks" by offering you a "We Scoop" sticker for your trash can or a Chinook Book mobile coupon book.



**3. Choose the item you'd like:**

- A "We Scoop" sticker for my trash can.\*
- A Chinook Book mobile coupon access code (requires a smartphone)\*
- None, thanks.

\*Available to residents within Bothell city limits only. Only one sticker or Chinook Book per household, please.



City of Bothell™

## Bothell's Super Scooper Pledge

"We Scoop" sticker

By putting a "We Scoop" sticker on your curbside trash toter, you're showing your neighbors that you're committed to scooping your dog's poop at home and on walks.



**4. Please enter your mailing address for the "We Scoop" sticker. *We will not use your information for any purposes outside of this pledge.***

First & last name

Mailing address

Street address (If different from mailing address. This helps us identify which watershed you're protecting. Thanks!)

City

Zip



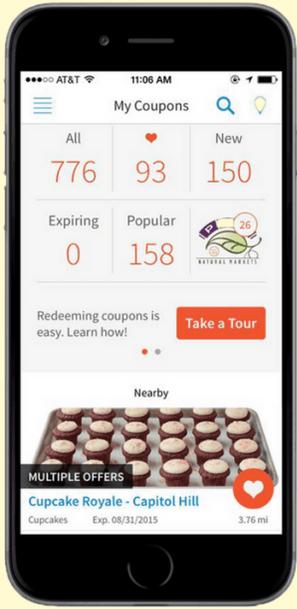
City of Bothell™

## Bothell's Super Scooper Pledge

Chinook Book

Chinook Book gives you 12 months of access through your smartphone to nearly 700 coupons you can use at environmentally-friendly businesses throughout Puget Sound. You can even save money on the pet waste bags you're already buying!

**About the Chinook Book mobile coupon access code:** *In order to use the coupons, you must have a smartphone that meets these operating system requirements: iOS 8.0 and higher or Android 4.0 and higher.*



A **Chinook Book** mobile coupon app gives you 12 months of access to nearly 700 coupons you can use at green businesses throughout Puget Sound.

Smartphone required to download app and use coupons.

5. Please enter your email address in order to receive your free Chinook Book mobile coupon access code. *We will not use your information for any purposes outside of this pledge.*

Email address



City of Bothell™

# Bothell's Super Scooper Pledge

You're almost done!

Just a few more questions!

**\* 6. How many dogs do you own?**

1

3

2

4 or more

**\* 7. Do you own or rent your place of residence?**

Own

Rent

**\* 8. What kind of residence do you live in?**

Single family house with a lawn

Apartment without a pet area

Single family house without a lawn

Townhome

Apartment with a pet area

Condominium

Other (please specify)

**\* 9. What is your age range?**

18-24

55-64

25-34

65 or older

35-44

Prefer not to answer

45-54

**\* 10. What's your zip code?**

**\* 11. How did you hear about Bothell's Super Scooper Pledge?**

Facebook (BothellCool page)

Bothell Bridge

Facebook (Bothell Community page)

Word of mouth

City of Bothell website

Other (please specify)



City of Bothell™

# Bothell's Super Scooper Pledge

**Thanks for pledging to protect Bothell's streams, kids, families, and pets! Spread the word, not the turd.**

If you're a City of Bothell resident and you requested a Chinook Book mobile coupon access code or a "We Scoop" sticker, please expect to receive it within 10 business days.

If you live outside Bothell's city limits, we're not able to offer you a sticker or a Chinook Book, but we appreciate you taking the pledge just the same!

Learn more about pet waste at [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop).







## Form Center

By [signing in](#) or [creating an account](#), some fields will auto-populate with your information and your submitted forms will be saved and accessible to you.

### Pet Waste Sign Request



## Pet Waste Sign Request

Is pet waste a problem in your area? If you live in Bothell's city limits, you can request a free 12" x 24" metal-staked sign to help remind neighbors to pick up after their pets. We are offering one sign per requester, available while supplies last.

### Where is pet waste a problem in your area?\*

Please be specific.

### Is the problem on public or private property?\*

- Public
- Private
- I don't know

### Is there a pet waste bag station near the problem area?\*

- Yes
- No
- I don't know

Select Language ▼

Powered by [Google Translate](#)

**Tell us more about the problem.\***

Check all the apply.

- Pet waste left on grass
- Pet waste left on dirt
- Pet waste left on sidewalk or other walking path
- Pet waste left on my property by someone else
- Pet waste left in an area where kids play
- Pet waste bags found in my garbage can
- None of the above

**You're gonna pick that up, right?**



**Scoop it.  
Bag it.  
Put it in the trash.**



**It's the law.**  
BMC 6.16.011 & 8.60.240

 City of Bothell  
WWW.BOTHELL.WA.GOV/SCOOP

**If you're requesting a sign for PRIVATE PROPERTY**

If you're requesting a sign for private property or are part of an HOA, we will put your sign(s) in Will-Call at City Hall within 10 business days of receiving your request. We will email you when the sign is ready for you to pick up. City Hall is open Monday through Friday, from 8 a.m. until 5 p.m. and is located at 18415 101st Ave NE. Please let us know whether you or someone else will be picking up the sign(s) so we can put the correct name on the Will-Call pickup slip.

**If you're requesting a sign for PUBLIC PROPERTY**

In most cases, the City's Animal Control Officer is able to install a sign on public property within 10 business days.

**Is there anything else you'd like to tell us about the pet waste problem?**

---

**Your name\***

First Last

**Your home address\***

**Do you belong to a Home Owners' Association (HOA)?\***

- Yes
- No
- I don't know

Select Language ▼

**Your email address\***

We will not share this information.

**Your daytime phone number**

We will not share this information.

**Which county do you live in?**

- King
- Snohomish

**Thanks for reminding your neighbors to dispose of pet waste responsibly!**

If you live in Bothell's city limits, we will review your request and contact you with any further questions. We can offer one sign per requester, available while supplies last. We cannot provide signs to residents or areas that are outside of Bothell's city limits.

Receive an email copy of this form.

**Email address**

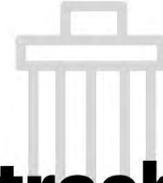
This field is not part of the form submission.

\* indicates a required field

# You're gonna pick that up, right?



**Scoop it.  
Bag it.  
Put it in the trash.**



This area is patrolled by City of Bothell's Animal Control Officer.

**It's the law.**  
\$250 fine per BMC 6.16.011 & 8.60.240



City of Bothell  
[bothellwa.gov/scoop](http://bothellwa.gov/scoop)

# DOG POOP.

**Scoop it.  
Bag it.  
Put it in the trash.**



## IT'S THE LAW.

\$250 fine per BMC 6.16.011 & 8.60.240

THIS AREA IS PATROLLED BY CITY OF BOTHELL'S ANIMAL CONTROL OFFICER.



City of Bothell  
[bothellwa.gov/scoop](http://bothellwa.gov/scoop)

	<b>Big or small, short or tall... WE POOP, YOU SCOOP.</b>			
				<b>It's the law.</b> \$250 fine per BMC 6.16.011 & 8.60.240 This area is patrolled by City of Bothell's Animal Control Officer.

# DOG POOP.

Scoop it.

Bag it.

Put it in the trash.

## IT'S THE LAW.

\$250 fine per BMC 6.16.011 & 8.60.240

THIS AREA IS PATROLLED BY CITY OF BOTHELL'S  
ANIMAL CONTROL OFFICER.



City of Bothell™  
[bothellwa.gov/scoop](http://bothellwa.gov/scoop)

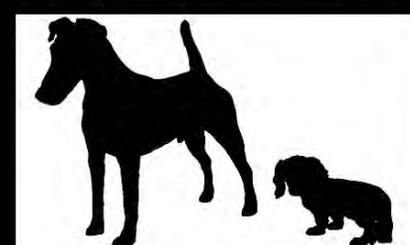
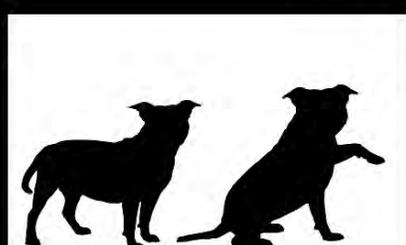
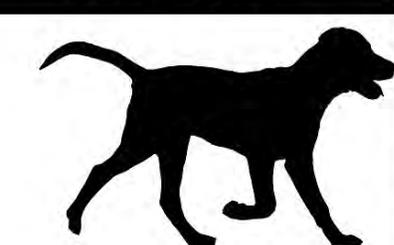
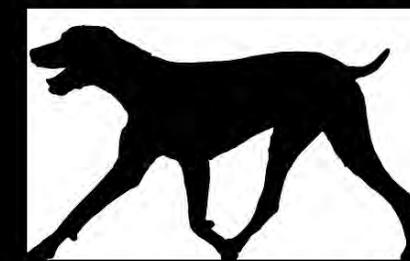
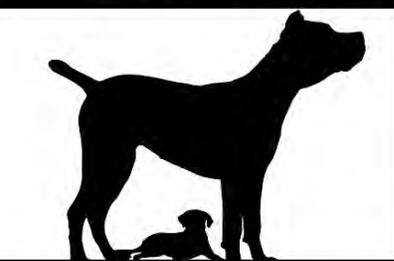


Dang, Rusty!  
What are they  
feeding you?!!



Big or small, short or tall...

**WE POOP,**  
**YOU SCOOP.**



**It's the law.**

\$250 fine per BMC 6.16.011 & 8.60.240

This area is patrolled  
by City of Bothell's  
Animal Control Officer.

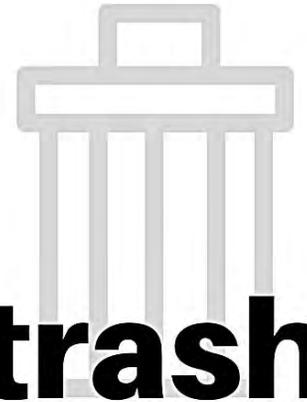
**You're gonna pick that up, right?**



**Scoop it.**

**Bag it.**

**Put it in the trash.**



This area is patrolled by City of Bothell's Animal Control Officer.

**It's the law.**

*\$250 fine per BMC 6.16.011 & 8.60.240*



City of Bothell™

[bothellwa.gov/scoop](http://bothellwa.gov/scoop)

# You're gonna pick that up, right?



**Scoop it.  
Bag it.  
Put it in the trash.**



**It's the law.**  
BMC 6.16.011 & 8.60.240



City of Bothell™  
[WWW.BOTHELLWA.GOV/SCOOP](http://WWW.BOTHELLWA.GOV/SCOOP)

# DOG POOP.

**Scoop it.  
Bag it.  
Put it in the trash.**



**IT'S THE LAW.**  
BMC 6.16.011 & 8.60.240



City of Bothell™  
[www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop)



Big or small, short or tall...  
**WE POOP,  
YOU SCOOP.**

It's the law. BMC 6.16.011 & 8.60.240  
City of Bothell™  
[www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop)

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City of Bothell™

[www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop)





Big or small, short or tall...

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City of Bothell™

[www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop)

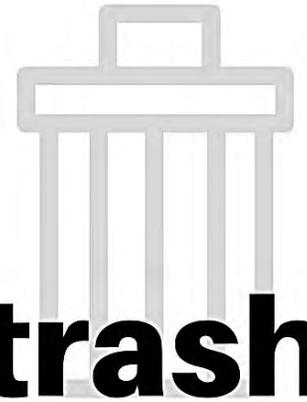
**You're gonna pick that up, right?**



**Scoop it.**

**Bag it.**

**Put it in the trash.**



**It's the law.**

**BMC 6.16.011 & 8.60.240**



**City of Bothell™**

[WWW.BOTHELLWA.GOV/SCOOP](http://WWW.BOTHELLWA.GOV/SCOOP)

# Pet Waste

## Dog poop: What's all the stink about?

### It's a health risk

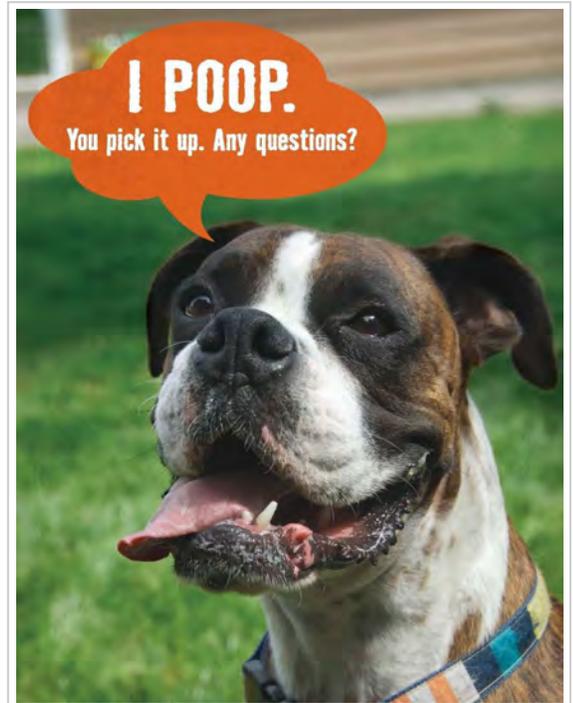
Dog poop is more than just a squishy, smelly nuisance - it's a health risk to dogs and people, especially children. Dog poop is full of bacteria like Giardia and E. coli that can make people sick.

### Rain makes it worse

When it rains, the dog poop is washed into our storm drains where it's carried to the nearest stream, making the water unsafe.

Would *you* want to swim or play in that water?

The dog is cute, but his poop sure isn't.



## What should you do with your dog's poop?

### Do

- **Scoop** it, **bag** it, and **trash** it at home and in public.
- Tell your family, friends, and neighbors to scoop the poop.

### Don't

- Just walk away and leave pet waste on public or private property.
- Bag it and then leave the bag along a trail or public space.

Select Language ▼

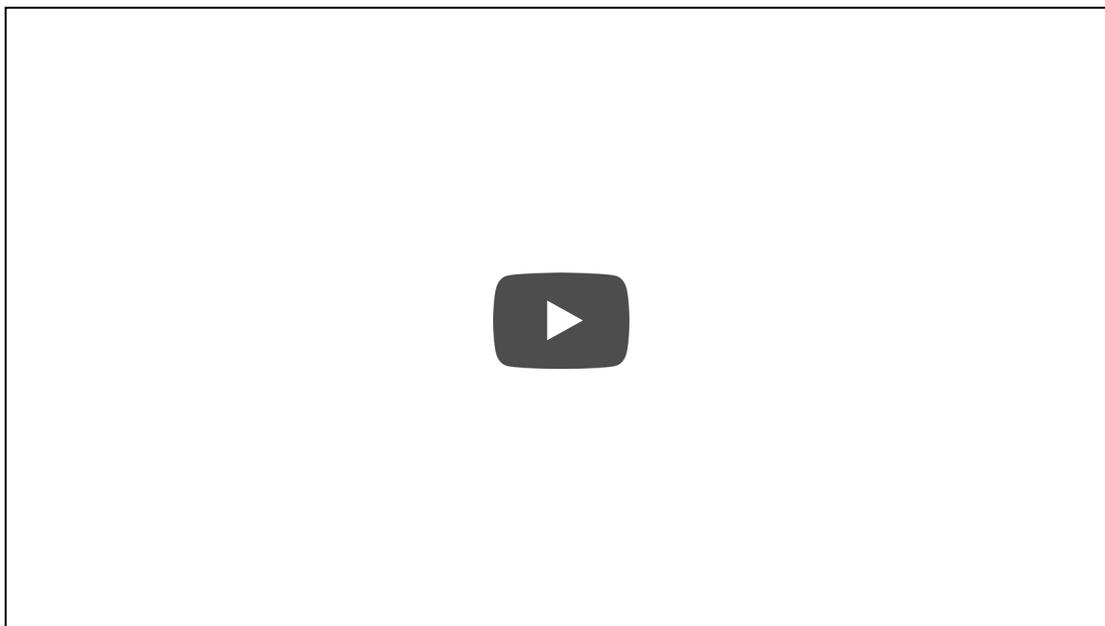
Powered by [Google Translate](#)

- Let us know if someone is leaving their pet waste behind (we need a photo or video in order to enforce the law).
- Let pets or children play in areas full of pet waste.

## Is your dog's poop really worth \$250?

**Not picking up after your pet is against the law!** Per [Bothell Municipal Code 6.16.011](#) and [8.60.240](#), it's illegal to leave your pet waste on public or private property. Doing so could earn you a \$250 fine **per violation**.

For more information, visit our [Animal Services](#) page.



## Contact us

### Christi Cox

Surface Water Program Coordinator

[Email](#)

## Take the Super Scooper Pledge

Make a promise to pick up after your dogs - in public and at home! [Take the pledge](#).



# We Scoop

Scoop the poop, bag it,  
and place it in the trash.

Puget Sound   
Starts Here.org

## Is pet waste a problem in your area?

[Request a pet waste sign](#) to remind your neighbors to pick up after their pets.

Select Language ▼

Powered by [Google Translate](#)

# You're gonna pick that up, right?



**Scoop it.**

**Bag it.**

**Put it in the trash.**



**It's the law.**  
BMC 6.16.011 & 8.60.240



City of Bothell™

[WWW.BOTHELLWA.GOV/SCOOP](http://WWW.BOTHELLWA.GOV/SCOOP)

## Just a little light bathroom reading...

- [Pet Waste Handout \(PDF\)](#)
- [Ecology Pet Waste Poster \(PDF\)](#)
- [Fecal Coliform DNA in North Creek \(PDF\)](#)
- [Percentage of Fecal Coliform DNA Sources \(PDF\)](#)
- [Puget Sound Partnership Pet Waste Poster \(PDF\)](#)

Saturday, August 18th from 10 a.m. - 2 p.m.

# Sustaina MANIA

Thank you  
sponsors:



## FUN FOR ALL AGES! Come check out these vendors:

350 Eastside • Bats Northwest • Community Transit • Community Van • Friends of North Creek Forest • Garden Hotline • HoneyMel • Imperfect Produce • Lenz Enterprises • Orca Conservancy • PCC Community Markets • Recology CleanScapes • Sea Witch Botanicals • Shelton View Forest Stewardship Association • Smith Brothers Farms • Tilth Alliance • Washington Poison Center • Whale Scout • WSU Snohomish County - Natural Resources

Sign up to be a vendor: [www.bothellwa.gov/sustainamania](http://www.bothellwa.gov/sustainamania)

## Stay green with home maintenance and repairs

Summer is here, along with the nice weather. It's a great time to tackle some of those home maintenance or repair projects you've been putting off, or spruce up your yard. But remember – allowing any polluted wash water into the streets and storm drains is against the law. Whether you're doing the work yourself or hiring a contractor, you're responsible for what goes into the public storm system.

### Common sources of pollution

- Pressure washing
- Painting
- Vehicle maintenance
- Carpet cleaning
- Concrete work
- Pesticides and fertilizers

Pollutants from these activities can harm you, your pets, and the environment. You can protect yourself, your family, and your local streams by keeping polluted wash water out of Bothell's storm drains.

**Remember, nothing but rain down the drain!**



Do you live in an apartment or condo? Starting this summer, learn how to waste less through a new program sponsored by the City of Bothell in partnership with Recology CleanScapes. Waste Wise offers FREE tools and resources designed to make recycling and composting easy and convenient for multi-family residents and their property managers.

# WASTE WISE

Waste Wise will provide:

- Resources and education about recycling and composting for residents
- Tools to help tenants collect and separate recyclables and organics
- Assistance in promoting Waste Wise for participating properties

Learn more: [www.bothellwa.gov/wastewise](http://www.bothellwa.gov/wastewise)




### I RECYCLE SO HARD

Check out our I Recycle So Hard videos on Facebook, YouTube, Twitter and our [www.bothellwa.gov/irecyclesohard](http://www.bothellwa.gov/irecyclesohard)



## CAR WASHING

When you wash your car in your driveway, you're releasing harmful pollutants like oil, grease, heavy metals, solvents and soaps. Once the polluted water leaves your driveway, it travels to the nearest storm drain and makes its way – untreated – to local streams, the Sammamish River, Lake Washington, and eventually Puget Sound.

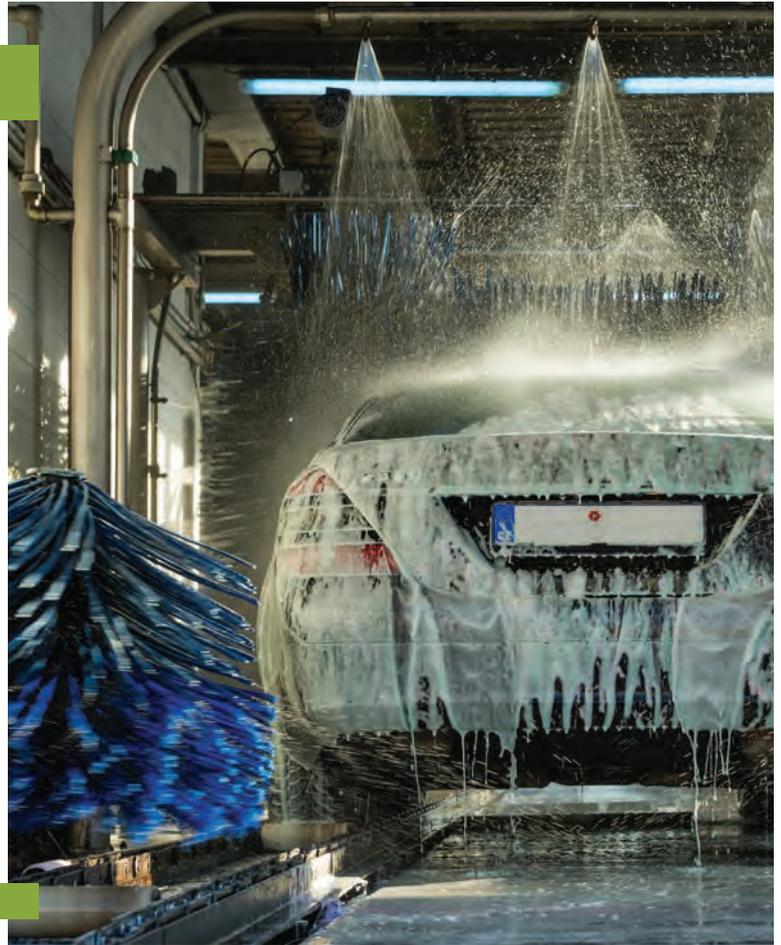
Even biodegradable soap pollutes our waters! Would you want to swim in that?

### Use a commercial car wash instead

The wash water from a commercial car wash is piped into water treatment facilities or runs into state-approved drainage facilities designed to protect the environment.

### But what about my fundraiser?

Find a list of more environmentally-friendly fundraisers at [www.bothellwa.gov/carwashing](http://www.bothellwa.gov/carwashing), such as selling discounted commercial car wash tickets, local coupon books, and more.



## Wastemobile



You can pick up a Wastemobile checklist at The Recology Store or request one be sent to you at [www.bothellwa.gov/wastechecklist](http://www.bothellwa.gov/wastechecklist)

Do you have cans of leftover oil-based paint, batteries, or antifreeze in your garage? Take those items and more to the Wastemobile, coming five more times to Bothell this year.

10 a.m. to 5 p.m.  
June 22-24 • July 27-29  
September 14-16 • October 19-21

*Dates are subject to change*

The Seattle Times Building  
19200 120th Ave NE

[hazwastehelp.org](http://hazwastehelp.org)  
or call 206-296-4692

 Local Hazardous Waste  
Management Program  
in King County

 Bothell CO<sub>2</sub>

## How to squish the pet waste problem in three easy steps

When you leave dog poop in your yard, in a park, on a sidewalk, in a planting strip – or anywhere – the rain washes it into storm drains and local streams. This isn't good for the water or the animals that live in it. Dog poop is raw sewage and contains nasty bacteria like E. coli and Giardia, which can make people and pets really sick. Some of those organisms can linger in the grass for up to four years.

### What you can do about it

1. **Scoop it.** Whether in your own yard or out on a walk, scoop it up.
2. **Bag it.** Use a pet waste bag, grocery bag, sandwich bag – whatever you have that will protect your hands.
3. **Put it in the trash.** The bag may be compostable, but the dog poop is not. It needs to go in the garbage can every time.



### Is your dog's poop really worth \$250?

Leaving pet waste lying around could land you a hefty fine. (Just take a look at Bothell Municipal Codes 6.16.011 and 8.60.240.)

### Is pet waste a problem in your area?

You can request a pet waste sign (or a few) for your neighborhood and learn more about why scooping matters at [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop). Be a good example and take the Super Scooper Pledge while you're there!

## GREEN LUNCH EVENT at The Recology Store

Stop into The Recology Store on **Saturday, September 8 from 12 p.m. - 3 p.m.** to learn about Waste Free Lunch Prep! Tips on reducing waste in packed lunches, strategies for eliminating single use disposable items, and green lunch product giveaways

**Recycle here - reduce your footprint everywhere!**



22833 Bothell-Everett Hwy #111  
Bothell, WA 98021

425.398.8612



[www.recology.com/stores](http://www.recology.com/stores)



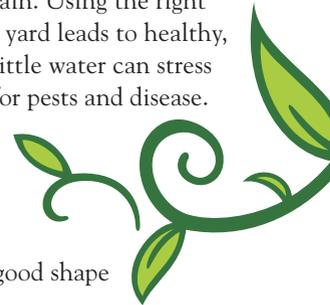
### Smart watering

Our region is known for being damp and mossy, but we often have dry summers with little rain. Using the right amount of water for your plants and yard leads to healthy, beautiful growth. Too much or too little water can stress your plants and make them targets for pests and disease.

### How to water wisely

- Water infrequently but deeply
- Let the rain soak in
- Keep your irrigation system in good shape

As an added bonus, smart watering saves you money on your water bill. Learn tips about smart watering and how to keep your plants and yard healthy: [www.naturalyardcare.org](http://www.naturalyardcare.org)



# Car Washing 101

## WHAT YOU NEED TO KNOW



When you're washing your car in the driveway, you're not just washing your car in the driveway. Everything that goes into our storm drains runs directly into our streams, lakes, rivers, and Puget Sound – untreated. Vehicle wash water contains pollutants like oil, grease, heavy metals, solvents and soaps. So when you wash your car in your driveway, all that harmful stuff goes down the storm drain and pollutes our waters. Even biodegradable soap pollutes!

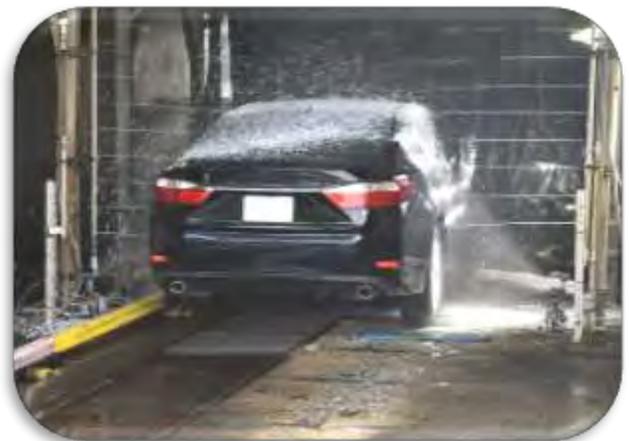
### Not-so-fun facts

- Over two million gallons of contaminated car wash water flows into our streams each year.
- Phosphates from car washing soap cause excess algae to grow in our waters. When algae decays, it uses up the oxygen in the water that fish need to survive.

### Car washing doesn't HAVE TO BE A problem

You have options. What will you do to help?

- Use a commercial car wash
- Use a waterless car washing product
- Wash on a lawn or gravel so the water can seep into the ground
- Divert your water away from the storm drain



### Learn more

Visit [bothellwa.gov/carwashing](http://bothellwa.gov/carwashing) and [pugetsoundstartshere.org](http://pugetsoundstartshere.org) for more ways to help keep Puget Sound healthy.



City of Bothell™

### ADDED BENEFITS

Cleaning your car the right way also helps you

- Support a healthy watershed
- Help restore salmon runs
- Set a good example for children and neighbors



City of Bothell

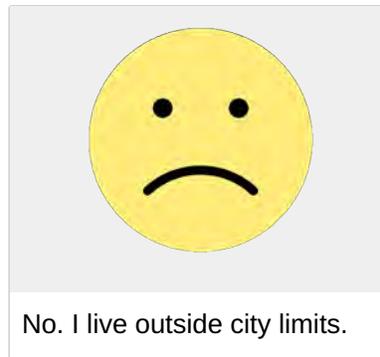
## Car Washing Survey 2018

Let's find out if you qualify

**City of Bothell residents** can get a free commercial car wash ticket just by answering some questions about how you usually wash your vehicle.

*\*We can only offer a commercial car wash ticket if you live within City of Bothell's limits, which typically includes zip codes 98011 and 98021. Car wash tickets are limited to one per household and are available while supplies last.*

### 1. Are you a City of Bothell resident?



City of Bothell

## Car Washing Survey 2018

Let us know how you usually wash your vehicle

**Now...let's talk about dirty vehicles!**



**2. How often do you wash your vehicle?**

- Daily
- Weekly
- Monthly
- Every three months
- Every six months
- Yearly
- Never

**3. Where do you usually wash your vehicle?**

- At an automatic car wash
- At a self-serve car wash (in a bay)
- Other (please specify)
- At the car dealership
- At home

**4. If you wash at home, what do you usually use to wash your vehicle?**

- Soap
- Biodegradable soap
- Waterless car washing product
- Other (please specify)
- Clay bar
- Just water
- I don't wash my vehicle at home

**5. If you wash at home, where does your used wash water usually go?**

- To the street
- To my lawn
- To another permeable surface (like soil)
- Into the sink, toilet, or indoor sewer drain
- Other (please specify)
- I don't know
- I use a waterless car washing product
- I don't wash my vehicle at home

**6. Do you think vehicle wash water contains any pollutants?**

- Yes
- No
- I don't know



City of Bothell

## Car Washing Survey 2018

Using a commercial car wash

**Vehicle wash water does contain harmful pollutants like oil, grease, heavy metals, solvents and soaps. When we wash these pollutants off our vehicles, the dirty water runs off our driveways and to the nearest storm drain. From there, the polluted water travels - untreated - to our local streams, lakes, and Puget Sound.**

***Even biodegradable soap contributes to poor water quality.***

**7. Knowing that vehicle wash water contains harmful pollutants, would you consider using a commercial car wash instead of washing your vehicle in your driveway?**

- Yes
- No
- Maybe
- Other (please specify)
- I don't know
- I already use a commercial car wash

**8. Do any of these reasons prevent you from using a commercial car wash? Check all that apply.**

- It costs too much
- It's not convenient
- There aren't any car washes near me
- I worry about the car wash equipment scratching or damaging my vehicle
- The car wash isn't open when I need it
- It doesn't get my car as clean as I'd like
- My vehicle is too tall
- Other (please specify)
- I do a better job myself
- I enjoy washing my car at home
- A little soap down the storm drain isn't a big deal
- I had a bad experience at a car wash
- I don't understand the benefit
- I don't like change
- I already use a commercial car wash

**9. Is there anything else you'd like to share with us about vehicle washing?**



City of Bothell

## Car Washing Survey 2018

How to get a free commercial car wash ticket



We will verify that your address is within Bothell's city limits. If it is, we will mail your car wash ticket to you within 10 business days. The ticket has no expiration date.



City of Bothell

## Car Washing Survey 2018

Just a few questions about you

**Almost done!**

### 12. What is your gender identity?

- Male  Transgender
- Female  Prefer not to answer
- Other (please specify)

### 13. What is your age range?

- 18-34  70 or older
- 35-54  Prefer not to answer
- 55-69



City of Bothell

## Car Washing Survey 2018

Thanks for filling out this survey!

Thank you for letting us know how you wash your vehicle. We appreciate your honesty! You can learn more about car washing at [www.bothellwa.gov/carwashing](http://www.bothellwa.gov/carwashing).



Talk dirty  
to me.

Then take me to  
a commercial  
car wash.



June 28, 2018

Name  
Address  
Bothell, WA 980XX



Dear \_\_\_\_\_,

Thank you for taking our car washing survey and letting us know how you wash your vehicle. I've enclosed a free ticket to use at any of the commercial car washes listed on the back of the ticket. It has no expiration date.

### Why shouldn't I wash my car in my driveway?

**It pollutes.** If you're washing your vehicle on a hard surface like pavement or concrete, the dirty wash water has nowhere to go except away from your driveway, into the street, and right into the nearest storm drain. Anything that enters a storm drain travels – untreated – through storm pipes that empty out into streams, lakes, rivers, and eventually Puget Sound.

Dirty wash water contains oil, grease, metals, surfactants, phosphorous, solvents, and soap. Even biodegradable soap still allows all those pollutants into our waterways.

If you need to wash at home, try washing over a surface that will let the dirty wash water filter out pollutants by infiltrating into the ground, like over grass, soil, or gravel-covered dirt.

### What's the benefit of using a commercial car wash?

**It protects our water and uses less of it.** Most commercial car washes reuse water several times before they send it to the sanitary sewer system, where it is then cleaned and treated before it's discharged into the Puget Sound. Commercial car washes prevent harmful pollutants from entering our waterways.



Learn more about car washing and other ways you can help keep Bothell (and Puget Sound) healthy at [www.bothellwa.gov/carwashing](http://www.bothellwa.gov/carwashing).

Sincerely,

Christi Cox  
Surface Water Program Coordinator  
[christi.cox@bothellwa.gov](mailto:christi.cox@bothellwa.gov)



## Alternative Car Wash Fundraisers

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### Is your school, sports team, church, or group looking to raise money?

Here in the Pacific Northwest, community groups are moving away from car wash fundraisers in order to protect local streams, lakes, and Puget Sound. The soap, grime, and oils that come off cars harm aquatic life, including some of our favorite local animals like orcas and salmon. Instead, community groups are getting creative and successfully raising funds in new, fun ways. Here is a list to get you started!

### Sell things!

**Car wash tickets.** Commercial car washes protect local creeks by capturing and treating their dirty wash water. Tickets can be purchased at a discounted rate from:

- Puget Sound Car Wash Association charity fundraiser program:  
[www.charitycarwash.org](http://www.charitycarwash.org)
- Brown Bear Car Wash also has a charity fundraiser program:  
<https://brownbear.com/programs/car-wash-fundraiser>

**Sell local coupon books.** Sell coupon books to support your program. Try selling the popular Chinook Book with coupons and discounts for local businesses:  
[www.chinookbook.com](http://www.chinookbook.com)

**Hold a magazine drive.** Run an annual magazine drive to raise funds to support your program. Fundraisers can work with organizations such as Great American:  
[www.gafundraising.com](http://www.gafundraising.com)

**Sell eco-friendly products.** Many organizations allow donors to order products such as reusable bottles or bags with your charity's name on them online, so you won't have to purchase products in advance. Example partner: [www.kotisdesign.com](http://www.kotisdesign.com)

**Hold an auction.** Ask local businesses to donate items for an auction. Also, consider including experiences with teachers or senior staff.

**Hold a garage sale.** Ask family and friends to donate items in good condition that they no longer want or use! Host a large garage sale and earn money for your organization!

**Raise funds with a scrip program.** Scrip programs allow participating merchants to contribute a percentage of donors' purchases to your organization. Donors sign up and shop for items they usually would with participating merchants, and merchants give back to your organization. Example partners include [www.escrip.com](http://www.escrip.com) and [www.shopwithscrip.com](http://www.shopwithscrip.com)

## Collect things!

**Partner with TerraCycle.** TerraCycle pays schools for collected empty juice packs and wrappers which they will then turn into bags, pencil boxes, and other items to reduce the waste going to the landfill. <http://terracycle.net>

**Hold an online donation drive.** Set up a crowdfunding page and raise money online. Fundraisers can work with organizations such as [www.fundly.com](http://www.fundly.com)

**Collect latex paint for recycling.** Hold a latex paint recycling event and raise money for your organization. Contact [peter@greensheepaint.com](mailto:peter@greensheepaint.com) for information.

**Hold a used clothing/goods drive.** Raise funds for your organization by collecting gently used items. Example partner: [www.funds2orgs.com](http://www.funds2orgs.com)

**Collect e-waste for recycling.** Raise funds by recycling items such as empty ink cartridges, cell phones, laptops, and iPods. There is no cost to participate and unlimited fundraising profit for collecting items. Example partners: [www.cfktoday.com](http://www.cfktoday.com) and [www.fundingfactory.com](http://www.fundingfactory.com)

## Have fun!

**Hold a read-a-thon.** Ask people to pledge a dollar amount for every book read!

**Organize a walk-a-thon or fun-run on campus.** Ask people to pledge a certain dollar amount for each lap participants walk or run for their cause! Here's how to do it: [https://charity.lovetoknow.com/How\\_to\\_Organize\\_a\\_Walkathon](https://charity.lovetoknow.com/How_to_Organize_a_Walkathon)

**Partner with a local business!** Work with your local businesses for a percentage of proceeds: help sell products locally or organize a restaurant dine out! Some businesses will allow you to organize a bingo or trivia night in order to earn money!

# Car Washing

## Think twice before washing in your driveway

Vehicle wash water contains pollutants like oil, grease, heavy metals, solvents and soaps. When these harmful pollutants run off our driveways and roads, they go down the storm drain and travel to our local streams, lakes, and Puget Sound - **untreated**. Even biodegradable soap pollutes!

Car going through a commercial wash



Over 2,000,000 gallons of contaminated car wash runoff flows into our streams each year.

## Use a commercial car wash

You can reduce pollution in our streams by using a commercial car wash.

### Can't use a commercial car wash facility?

- Wash on your lawn or graveled area so the soil can soak up the water and break down the pollutants
- Try using a waterless car wash product
- Save money by hand-washing your vehicle in a commercial car wash bay
- Always divert the wash water away from the street and storm drains

Select Language

Powered by [Google Translate](#)



### Fundraiser Alternatives

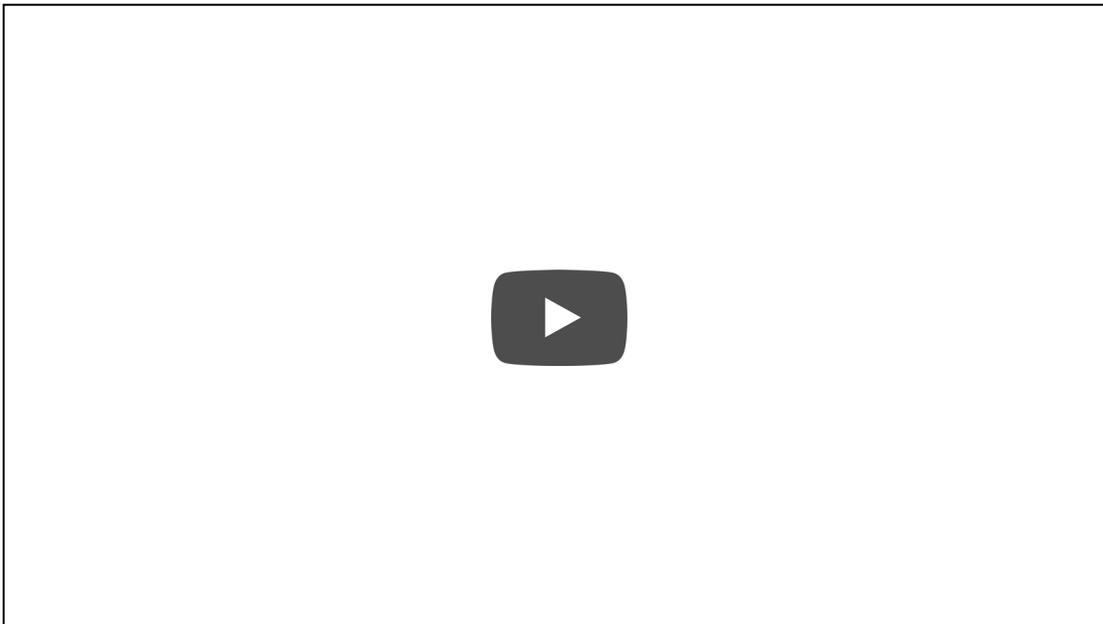
Click for some environmentally-friendly ways your school or organization can have fundraisers without washing cars.

**Q:** Are car washing fundraisers allowed in Bothell?

**A:** [Click for the answer.](#)

### Need more encouragement to do the right thing?

[Bothell Municipal Code 18.04.260](#) contains a long list of contaminants you're not allowed to dump in the storm drain. Not surprisingly, soap is one of them. Don't find yourself with a code violation.



### Contact us

Christi Cox

Select Language ▼

Powered by [Google Translate](#)

### Spill Hotline

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any storm drains or local streams.

### Are you a City of Bothell resident?

### Get a free car wash ticket!

Answer some questions about how you usually wash your car, and **if you're a City of Bothell resident**, we'll send you a free commercial car wash ticket.\*

[Take me to the survey!](#)

**PUGET SOUND CAR WASH ASSOCIATION**

**Thanks for keeping Puget Sound healthy!**  
 Organization: City of Bothell Public Works

**GOOD FOR ONE EXTERIOR CAR WASH**

Cash Value 1/20 of 1 cent - Not valid with any other offer. Normal restrictions apply. Good for one professional exterior car wash. Prices may vary among participating locations (riding on back). Automatic car washes only. Exclusion of Liability: The ticket holder assumes all risk of personal loss or property loss by use of this ticket by any cause whatsoever. The Puget Sound Car Wash Association's liability is specifically excluded by this condition and the ticket holder specifically releases the Puget Sound Car Wash Association and all claims thereto. Tickets not valid unless they are whole.  
 For information call the PSCWA at 206.622.8425 or visit [www.charitycarwash.org](http://www.charitycarwash.org)

**Get a free car wash ticket!**

**Redeem this ticket at any of these locations:**

<b>Bellevue</b> <i>Elephant</i> 12900 Bell-Red Rd	<b>Lynnwood</b> <i>Mr. Kleen Car Wash</i> 19907 44th Ave W
<b>Bremerton</b> <i>Shur-Kleen</i> 3311 Kitsap Wy	<i>Mr. Kleen Car Wash</i> 19611 Alderwood Mall Pkwy
<b>Burien</b> <i>Elephant</i> 13855 1st Ave S	<b>Maple Valley</b> <i>Elephant</i> 27018 Mpl Vily Hwy SE
<b>Centralia</b> <i>The Wave Carwash</i> 619 Hamson Ave	<b>Marysville</b> <i>Captain Dizzy</i> 1219 State Ave
<b>Everett</b> <i>General Brushless</i> 6101 Evergreen Wy	<b>Olympia</b> <i>Shur-Kleen</i> 1616 Harrison Ave
<b>Federal Way</b> <i>Elephant</i> 31458 Pacific Hwy S	<b>Puyallup</b> <i>Classy Chassis</i> 105 7th Ave
<b>Fort Lewis</b> <i>Shur-Kleen</i> Blg 2205 14th & Liggett	<b>Redondo</b> <i>Elephant</i> 27607 Pacific Hwy S
<b>Gig Harbor</b> <i>Great Car Wash</i> 6750 Kimball Dr	<b>Seattle</b> <i>Elephant</i> 616 Battery St
<b>Kirkland</b> <i>Rose Hill</i> 12633 NE 85th St	<i>Elephant</i> 2763 4th Ave S
<b>Lacey</b> <i>Shur-Kleen</i> 4240 Pacific Ave	<b>Tacoma</b> <i>Elephant</i> 2501 Pacific Ave
<i>The Wave Car Wash</i> 185 Marvin Rd SE	<i>Classy Chassis</i> 1211 S Sprague Ave
<i>The Wave Car Wash</i> 4655 Whitman Ln SE	<i>The Wave Car Wash</i> 2501 Pacific Ave
<b>Lakewood</b> <i>Shur-Kleen</i> 11621 Bridgeport Wy	<b>Tumwater</b> <i>The Wave Carwash</i> 5330 Littlerock Rd
<b>Lakewood/Tacoma</b> <i>Classy Chassis</i> 7701 Custer Rd W	<i>Tumwater Auto Spa</i> 6040 Capitol Blvd SE

Participating locations subject to change. Visit our website for our current listing.  
[www.charitycarwash.org](http://www.charitycarwash.org)

*\*While supplies last*

*\*One ticket per household*

## **More information about car washing**

- [Car Washing 101 - What you should know \(PDF\)](#)
- [10 Facts about Car Washing \(PDF\)](#)
- [Assessment of Car Wash Run Off Treatment Using Bioretention Mesocosms \(PDF\)](#)
- [Car Wash Impact Model \(PDF\)](#)
- [Fish Toxicity Report \(PDF\)](#)
- [Mobile Car Wash Study Final Report \(PDF\)](#)
- [Residential Car Wash Water Monitoring Study \(PDF\)](#)
- [Vehicle and Equipment Washwater Discharges Best Practices \(PDF\)](#)

# Fundraiser Alternatives



## Why not try a green, low-cost fundraiser instead of a car wash?

These alternatives are more environmentally-friendly and can help you raise just as much money as a car wash - sometimes even more!

### Have an auction

Ask local businesses for donated items or services to auction. Involve teachers and parents by offering hobby-specific experiences like a fly-fishing adventure or cooking lessons.

### Hold a magazine drive

Even with all the technology we have, people do still read magazines! Learn more at [Great American Opportunities](#) and [American Publishers](#).

### Sell cookie dough

Because who doesn't like being able to make warm, gooey, fresh cookies magically appear in less than 12 minutes?

### Hold a Walk-a-Thon or Fun Run

People can pledge a certain dollar amount for each lap students walk or run for their cause.

### Collect e-waste for recycling

Gather items like old cell phones, laptops, iPods, and empty ink cartridges. It costs nothing to participate, and there's no limit to how much money you can raise by collecting items. Check out sites like [Cartridges for Kids](#) and [Funding Factory](#) to get started.

### Sell local coupon books

[Chinook Book](#) gathers great offers from a carefully-selected community of local businesses who are committed to environmental and socially responsible business practices. With print edition and mobile app options, your donors can save all year on local organic groceries, experiences and adventures, sustainable home and garden solutions, wellness services, farm-to-table restaurants, handmade and upcycled gifts, and more.

## Stuck on car washing?

Here are some safe options.

### Sell commercial car wash tickets

Commercial car washes capture and treat their car wash water, so they protect local streams. [Brown Bear](#) and the [Puget Sound Car Wash Association](#) sell discounted tickets for fundraisers.

### Rent a car wash stall

Some facilities allow you to rent a stall/bay for the day.

### Divert wash water

Divert the wash water to a large grass or gravel surface that will allow the wash water to completely infiltrate into the soil.

### Use waterless car washing products

Waterless products with microfiber towels remove dirt without scratching the paint and provide a nice wax coat.



# Beautify & Care for Your Streamside Property



Thursday, August 16<sup>th</sup> | 6:30 - 8:30 pm | Lytle House, Bothell

Snacks and refreshments will be provided - we can't wait to see you there!



**Who?** Homeowners living near streams, lakes & wetlands

### What?

Topics include controlling invasive weeds, using native plants to add value and beauty to your yard, and more

**Why?** Hear from experts and talk with other landowners about restoring your land



King Conservation District  
1107 SW Grady Way, Suite 130  
Renton, WA 98057  
[www.kingcd.org](http://www.kingcd.org)

**REGISTER NOW!**

Please visit <http://kingcd.eventbrite.com>  
to reserve your spot in this class.

**FREE!**

**FREE**

# Sustaina MANIA

# FUN FAMILY Event

August 18, 2018 • 10 a.m. - 2 p.m.  
Bothell City Hall Plaza  
18415 101st Ave NE, Bothell WA 98011



## VENDORS

- 👉 Kids Activity
- 👉 Touch a Truck
- 👉 Bike Rodeo
- 👉 Picnic on the Plaza
- 👉 Food Trucks
  - Macho Burgers
  - Tabassum
- 👉 Horse Creek Tours

**FREE bag of compost  
While supplies last**



- 350 Eastside
- Bats Northwest
- Bothell Library
- Cascadia College - Sustainable Practices
- Community Transit
- Community Van
- Friends of North Creek Forest
- Full Circle
- Garden Hotline
- Go Solar
- HoneyMel
- Imperfect Produce
- Lenz Enterprises
- Orca Conservancy
- PCC Community Markets
- Recology CleanScapes featuring The Recology Store pop up shop
- Sea Witch Botanicals
- Shelton View Forest Stewardship Association
- Smith Brothers Farms
- Snohomish County PUD
- Sound Transit Outreach
- Tilt Alliance
- UW Bothell Sustainability Office
- Washington Poison Center
- Water Watchers
- Whale Scout
- WSU Snohomish County - Natural Resources



Visit [www.bothellwa.gov/sustainamania](http://www.bothellwa.gov/sustainamania) for more information





Crew members Tessa Anton, Taylor Pesce and Seth Cavin work to install a rain garden in Bothell on Aug. 13. Katie Metzger/staff photo

## Bothell neighbors ‘conserve’ their community with rain gardens

Snohomish Conservation District partners with the city to install green stormwater infrastructure.

By Katie Metzger

Monday, August 27, 2018 9:27am | [NEWS](#)

[Snohomish Conservation District](#) is partnering with King County and the city of Bothell to install a cluster of four rain gardens in the neighborhood behind Bothell High School.

Alicia Kellogg, a community conservation project coordinator for the district, said the goal is to “build momentum in the city for doing more projects like this.” Rain gardens are “cheaper and more beautiful” than other stormwater infrastructure, she said.

To get the rest of the community involved, the district will host a volunteer planting party, where it will provide gloves, tools, refreshments and a chance to win a free rain barrel. The event will be held from 4-6 p.m. on Oct. 11 at 89th Avenue Northeast and Northeast 187th Street in Bothell.

The gardens in Bothell's cluster are being installed free of charge, except for the cost of plants, and the work is being done by the district's paid veteran crew, along with some AmeriCorps members from the Washington Conservation Corps.



Snohomish Conservation District is putting its veteran corps to work at a rain garden cluster in Bothell. Katie Metzger/staff photo

A rain garden is a landscaped area that collects, absorbs and filters stormwater runoff from rooftops, driveways, patios and other hard surfaces that don't allow water to soak in. Gardens in Bothell's cluster range from 110-200 square feet.

The gardens help keep storm drains and sewer systems clear of rain and stormwater runoff, which can sometimes contain pesticides, fertilizers, petroleum, animal feces and other pollutants, Kellogg said. These can eventually end up in streams, wetlands, lakes and marine waters like the Puget Sound.

**"The more we can keep water on the property and let it absorb at a natural rate, the better it is for the environment," Kellogg said.**

According to the [12,000 Rain Gardens in Puget Sound](#) campaign, led by Washington State University and Stewardship Partners, rain gardens "beautify the neighborhood, prevent flooding and fight pollution."

There are many steps in rain garden construction, from planning to planting, but there are also readily available resources for people who want to put them in their yards, including the Rain Garden Handbook for Western Washington that can be found online.

The first step, after deciding where the garden should go, is to "dig a big hole," Kellogg said, and remove native soils.



The first step in building a rain garden is to dig a hole and remove the soil. Katie Metzger/staff photo

Rain gardens are carefully designed to achieve their goal by using spongy living soils and properly chosen plants. Bothell's cluster of rain gardens contain a bioretention soil mix from Cedar Grove, made up of 60 percent sand and 40 percent compost, along with animal-friendly hog fuel.

Adding soil and mulch is the second step in construction, along with river rock, which can help slow down and disperse water and prevent erosion.

Then, a trench is dug to connect the garden to the drain pipe on the home.

The last step is planting. Kellogg said that garden installation may seem like a lot of work initially, but over time, it cuts down on lawn maintenance. The right selection of plants, including native species and others adapted to western Washington, mean that a rain garden will need little or no watering after two or three years.

Along with educational resources, financial help is also available for people who want to install rain gardens. Snohomish Conservation District offers free consultations for people who live in the county and landowners within the King County Wastewater Treatment Division service area can apply for Green Stormwater Infrastructure Mini Grants for up to \$1,500.

The district is also installing other stormwater infrastructure in the Bothell neighborhood, including rain barrels that can hold up to 50 gallons of water. It's also working with homeowners' associations on ways to prevent stormwater runoff and help the environment.

Contact the Snohomish County Community Conservation Team at [ccteam@snohomishcd.org](mailto:ccteam@snohomishcd.org) to learn more.



Tessa Anton puts the finishing touches on a rain garden that's almost ready for planting. Katie Metzger/staff photo

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## BOTHELL-KENMORE REPORTER

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# Rain gardens article in the Everett Herald

[Bothell neighbors conserve with rain gardens](#)



*Crew members Tessa Anton, Taylor Pesce and Seth Cavin work to install a rain garden in Bothell on Aug. 13. (Katie Metzger / Bothell-Kenmore Reporter)*

[The Snohomish Conservation District partners with the city on green stormwater efforts.](#)

Friday, September 7, 2018 1:30am

**By Katie Metzger / Bothell-Kenmore Reporter**

BOTHELL — The Snohomish Conservation District is partnering with King County and the city of Bothell to install a cluster of four rain gardens in the neighborhood behind Bothell High School.

Alicia Kellogg, a project coordinator for the district, said the goal is to build momentum for more projects like this. Rain gardens are “cheaper and more beautiful” than other stormwater options, she said.



*The first step in building a rain garden is to dig a hole and remove the soil. (Katie Metzger / Bothell-Kenmore Reporter)*

To get others involved, the district will host a volunteer planting party, where it will provide gloves, tools, refreshments and a chance to win a free rain barrel. The event is set for 4 to 6 p.m. Oct. 11 at 89th Avenue NE and NE 187th Street.

The gardens in Bothell are being installed for free, except for the cost of plants, and the work is being done by the district's [paid crew of military veterans](#), along with some AmeriCorps members from the Washington Conservation Corps.



*Crew members Seth Cavin and Sara Rocero work on a rain garden in Bothell on Aug. 13. (Katie Metzger / Bothell-Kenmore Reporter)*

A rain garden is a landscaped area that collects, absorbs and filters stormwater runoff. The ones in Bothell might run up to 200 square feet in size.

The gardens help keep storm drains and sewer systems clear of rain and stormwater runoff, which can sometimes contain pesticides, fertilizers and other pollutants, Kellogg said. These can end up in streams, wetlands, lakes and Puget Sound.

“The more we can keep water on the property and let it absorb at a natural rate, the better it is for the environment,” Kellogg said.

For more information about rain gardens, contact [ccteam@snohomishcd.org](mailto:ccteam@snohomishcd.org).

*This story [originally appeared in the Bothell-Kenmore Reporter](#), a sibling paper of The Daily Herald.*



*Snohomish*

*Conservation District is putting its veteran corps to work at a rain garden cluster in Bothell. (Katie Metzger / Bothell-Kenmore Reporter)*

# From Snohomish Conservation District's blog

<http://snohomishcd.org/blog/2018/11/2/rain-gardens-rain-barrels-and-bioswales-oh-my?fbclid=IwAR2pTWXdnfGI7OkQcEp1SllqPoxqCt9KBtATDnETdWRv7KNUhfmc8PRHGx8>



Programs & Services | News | Events | Projects | About | Contact | Search

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## Rain Gardens, Rain Barrels and Bioswales - Oh My!

November 05, 2018

As fall began, Snohomish Conservation District co-hosted many community events involving a variety of ages all over the district, and we were blessed with nice weather! We love to teach members of the community how they can protect natural resources including water and soil through simple actions like installing a rain barrel or planting a new rain garden.

For those unfamiliar with the term bioswale, it is very similar to a rain garden, but they are located next to roadways designed to catch debris and filter pollutants out of stormwater from the street. Rain gardens typically filter stormwater off of one's roof or other non-permeable structures.

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### Bothell

We partnered with the City of Bothell, their environmental arm Bothell Cool, Stewardship Partners / 12,000 Rain Gardens, and King Conservation District to build and plant four rain gardens in the neighborhood near the high school. Alicia Kellogg, one of our community conservation project coordinators, began the partnership, to "build momentum in the city for doing more projects like this." Rain gardens are "cheaper and more beautiful" than other stormwater infrastructure, she said. Around 30 people showed up to plant the rain gardens and about half of those were students from Bothell High School. Community members in attendance learned how they might incorporate rain gardens into their properties.

Photos courtesy of Christi Cox, City of Bothell.



[READ MORE IN THE BOTHELL-KENMORE REPORTER](#)

# Rain Gardens

## Local rain gardens featured in Bothell-Kenmore Reporter

Read [this August 2018 article](#) about how Bothell neighbors are helping conserve in their communities by installing rain gardens.

### What's a rain garden?

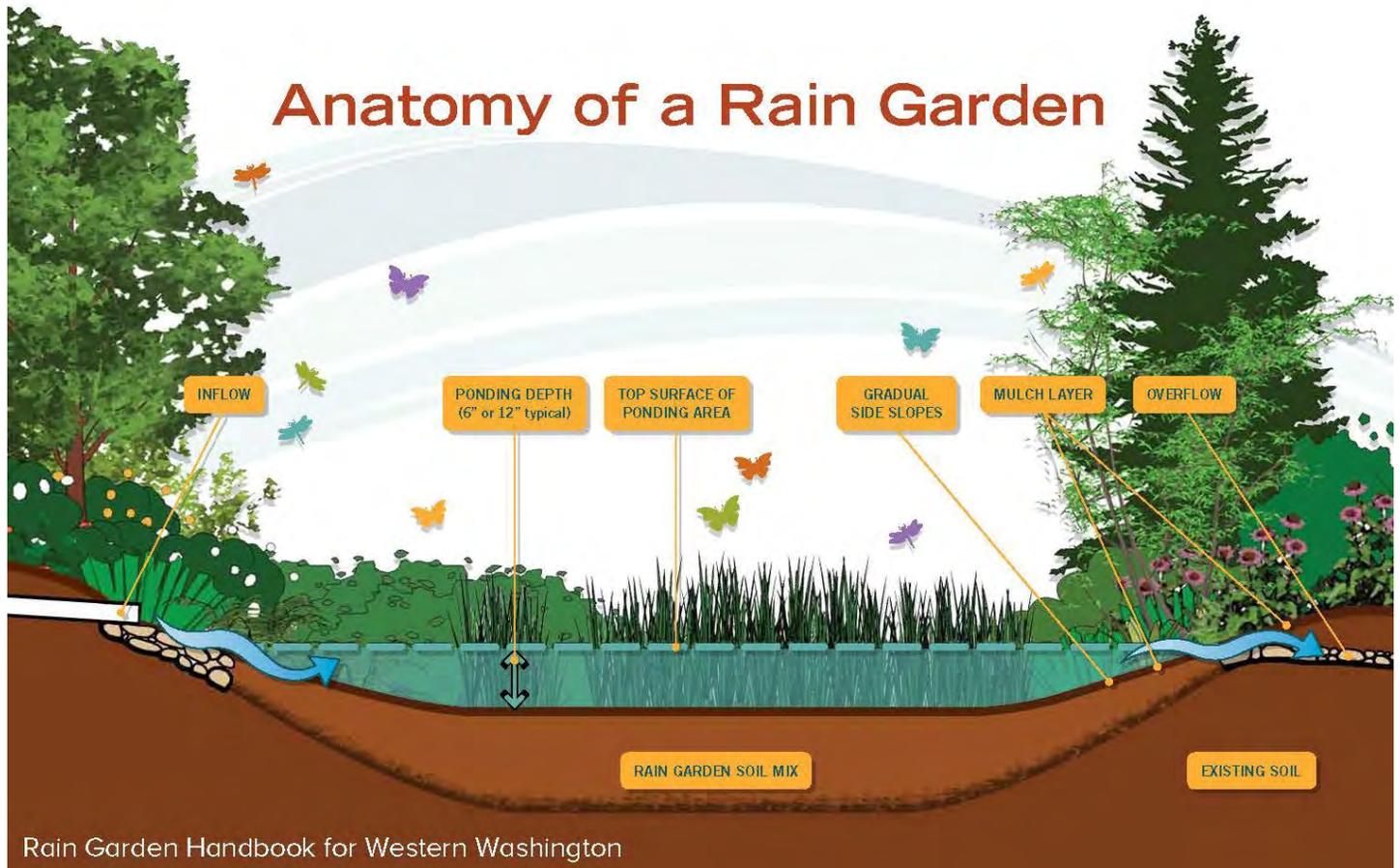
A rain garden is a bowl-shaped shallow planted area in the landscape where rain water collects and absorbs back into the soil. It mimics the natural environment of the undisturbed soils and forests that once covered the Puget Sound area. It is designed to slow, filter, and infiltrate runoff from roofs or pavement to safeguard local water quality. A rain garden uses spongy living soils and native plants to achieve its goal.

(Young) rain garden on east side of Multiway Boulevard



### A rain garden is a low impact development (LID) technique

There are many techniques and design considerations that help capture and move rain water while improving the aesthetics of your property - rain gardens are just one example. Low impact development manages the rainwater that falls on your property by allowing some to evaporate back into the air, some to absorb into the ground, some to be captured and used later as needed, and the rest to slowly pass into the stormwater system and into nearby streams. [Learn more about low impact development techniques in Bothell.](#)



## Rain garden guides and resources

### Managing Rainwater: A Homeowners Improvement Guide for Low Impact Development (LID) in Bothell

City of Bothell created this simple guide to help you learn about the different low impact development techniques and options available to help you get started. [View the guide.](#)

### Rain Garden Handbook for Western Washington: A Guide for Design, Maintenance, and Installation

WSU Extension, Department of Ecology, and Kitsap County created this step-by-step guide. It will help you determine whether a rain garden is right for your property and will guide you through the process of building one yourself. [View the guide.](#)

### Rain Garden Care: A Guide for Residents and Community Organizations

This guide - created by RainWise, King Conservation District, 12,000 Rain Gardens, and Stewardship Partners - offers tips about seasonal care, weeding, watering, mulching, caring for the plants, and keeping the water flowing. [View the guide.](#)

### Rain Garden Plants

See a [list of native plants](#) that can tolerate both saturated and drought conditions.

## FAQs

- [What is a rain garden?](#)
- [Why are rain gardens important?](#)
- [Why build a rain garden?](#)
- [Why use recycled materials in a rain garden?](#)
- [Why use native plants in a rain garden?](#)
- [How can I build a rain garden?](#)
- [What is low impact development \(LID\)?](#)

[VIEW ALL](#)

## Contact us

### Christi Cox

Surface Water Program Coordinator

[Email](#)

### Spill Hotline

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any storm drains or local streams.

## Demonstration rain garden project

The City partnered with the King County library system to provide a demonstration rain garden that captures and filters rain water from their pedestrian roof. This particular design is meant to function in a high traffic area with minimal maintenance.

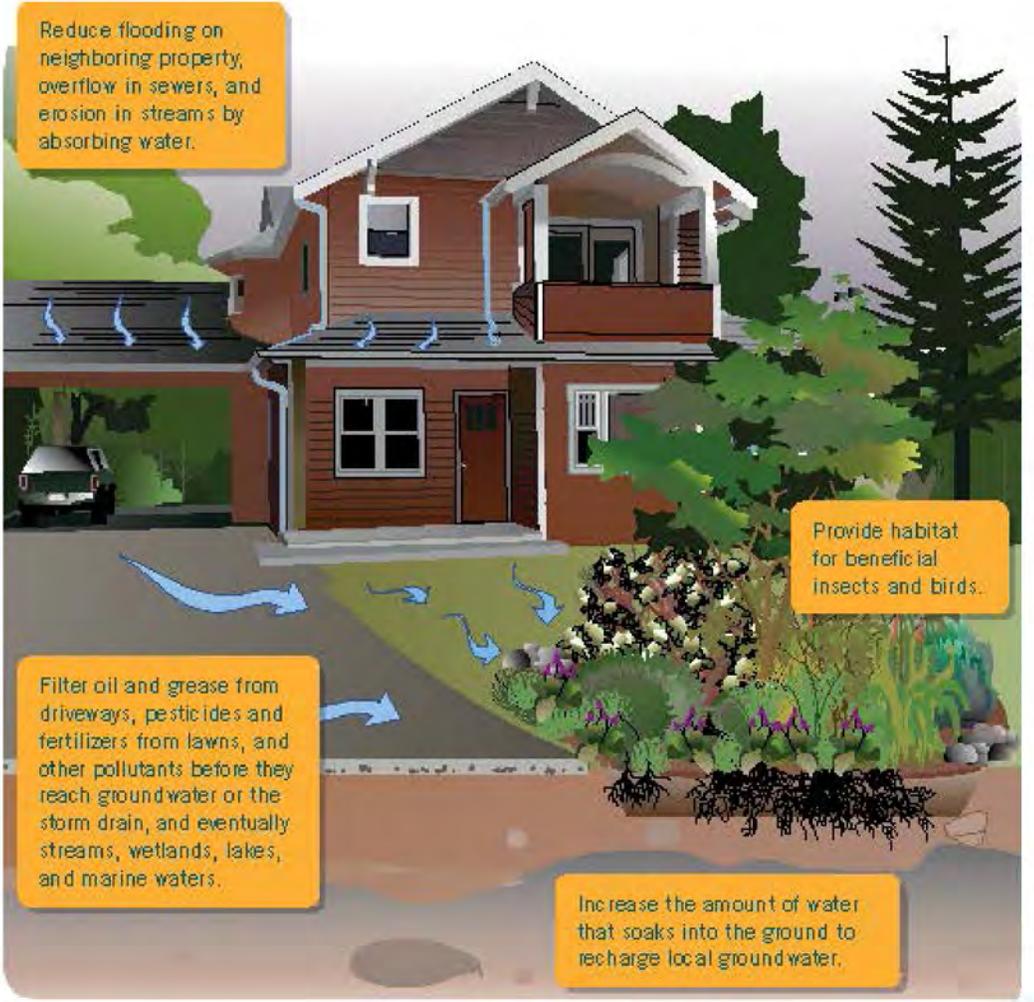
**Rain garden at Bothell Library (click to enlarge)**

Select Language ▼

Powered by [!\[\]\(5825f5d136b34b6a56d8d48ee36c416f\_img.jpg\) Google Translate](#)



Rain garden benefits (click to open PDF)



# Choosing native plants for rain gardens

To plan a successful rain garden, you'll need to familiarize yourself with plants that tolerate both saturated and drought conditions. Rain gardens have three planting zones characterized by different soil conditions. Here are some plant examples well suited to rain gardens.

## Native plants for rain gardens in the sun

Common name	Scientific name
Coastal Strawberry	<i>Frageria chiloensis</i>
Common Camas	<i>Camassia quamash</i>
Dense Sedge	<i>Carex densa</i>
Douglas Aster	<i>Aster subspicatus</i>
Northwest Cinquefoil	<i>Potentilla gracilis</i>
Oregon Iris	<i>Iris tenax</i>
Slough Sedge	<i>Carex obnupto</i>
Tufted Hair-grass	<i>Deschampsia cespitosa</i>
Western Columbine	<i>Aquilegia formosa</i>
Yarrow	<i>Achillea millefolium</i>

## Native plants for rain gardens in the shade

Common name	Scientific name
-------------	-----------------

Select Language ▼

## Common name

Coastal Strawberry  
Creeping Oregon Grape  
Dagger-leaved Rush  
Deer Fern  
False Solomon's Seal  
Fringecup  
Large-leaved Avens  
Piggyback Plant  
Salal  
Stream Violet  
Sword Fern  
Wood Sorrel  
Western Bleeding Heart

## Scientific name

Frageria chiloensis  
Mahonia nervosa  
Juncus ensifolius  
Blechnum spicant  
Smilacina racemosa  
Tellima grandiflora  
Geum macrophyllum  
Tolmiea menziesii  
Gaultheria shallon  
Viola glabella  
Polystichum munitum  
Oxalis oregano  
Dicentra formosa

## Caring for your plants

Once a rain garden is built, new plants need to be watered regularly for the first two to three years until they are well established. Mulching annually conserves water and reduces weeds until the plants close in over the soil. You can also help the plants to establish by weeding in the spring, summer, and fall months. If you use native plants and mulch them with leaf litter or arborist wood chip mulch, there should be no need for fertilizers, herbicides or pesticides. Keep the inlet and outlet clear of debris and well protected from erosion with rocks. Appropriate care and regular maintenance can protect your investment for many years to come.

- Page 9 from *Managing Rainwater: A Homeowners Improvement Guide for Low Impact Development (LID) in Bothell*



## GREEN LIVING

### It's Salmon SEEson!

Have you ever seen a salmon in your backyard? If not, your chance is coming up! North Creek is a favorite hangout for Chinook, Sockeye, and Coho from September through November.

Your best bet for catching a glimpse of these sleek swimmers is to walk the paved trail north along North Creek. Start at the creek's confluence with the Sammamish River south of the UW Bothell/Cascadia College campus, and walk north through the North Creek Business Park. Be sure to take a close look under the bridges, as these slippery spawners often like to hide there.

Find more places to see salmon in King and Snohomish counties at [www.bothellwa.gov/salmon](http://www.bothellwa.gov/salmon).



### Adopt a drain, prevent a flood

After the last leaves have fallen, you may be tempted to get out the blower and banish them from your yard. But if you blow those leaves into the street, you create a safety hazard for you and your neighbors. The storm drains in your street capture, move, and release rainwater into the nearest stream to keep excess water away from your property. If you let leaves clog those storm drains, you're at risk for localized flooding whenever it rains.

With over 8,400 storm drains in the city, we need your help to keep them working properly and to prevent flooding.

#### How you can help

- Rake fallen leaves into your organics bin.
- Use leaves as mulch on garden beds and landscaped areas.
- Tell your friends and neighbors to keep their storm drains clear.
- Join the Adopt-A-Drain program and volunteer to remove leaves from at least four storm drains in your area. Sign up at [www.bothellwa.gov/adoptadrain](http://www.bothellwa.gov/adoptadrain).

Learn more about keeping your home and neighborhood flood-free: [www.bothellwa.gov/preventfloods](http://www.bothellwa.gov/preventfloods).

### Be part of Pollution Prevention Week Sept. 17 - 23, 2018

Pollution Prevention Week turns 28 this year! Celebrate with your neighbors by choosing simple ways you and your family can reduce your environmental impacts.

How you can reduce pollution at home:

- Use a commercial car wash instead of rinsing suds and pollutants into the storm drain.
- Check your vehicle for leaks and fix the problem right away.
- Pick up pet waste so it doesn't leave behind harmful bacteria.
- Use fewer chemicals on your lawn and garden, or none at all.



Reducing and preventing pollution is easy!

Find more ways to be part of the pollution solution at [www.bothellwa.gov/pollutionpreventionweek](http://www.bothellwa.gov/pollutionpreventionweek).

## Natural Yard Care workshops in October

The City of Bothell has partnered with Tilth Alliance to offer you a series of free natural yard care workshops this fall. Learn from the experts by registering for one, two, or all three workshops.

Sign up online at [www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc).



### Healthy Lawns and Gardens from the Ground Up

Oct. 2, 7 – 9 p.m.

Healthy soil is the key to vibrant and hearty lawns and gardens. Join us to learn what makes soil work for your plants and how you can improve soil to keep plants growing stress-free, reduce maintenance, and save water. We will also talk about the best lawn choices for our region and how to manage weeds in your lawn naturally. This is an indoor, lecture-based workshop.

Bothell Operations Center, 21233 20th Ave SE, Bothell



### Smart Plant Choices for NW Gardens

Oct. 9, 7 – 9 p.m.

We'll introduce you to some beautiful plants that will thrive in your yard's conditions. Learn how to design and plant a garden that will weather our wet winters and dry summers – while remaining vibrant, healthy, and low maintenance. We will also talk about the best planting techniques to make sure your plants get the best start possible in your garden. This is an indoor, lecture-based workshop.

Bothell Operations Center, 21233 20th Ave SE, Bothell



### Hands-on Natural Yard Care Basics

Oct. 13, 10 a.m. – 2 p.m.

Join us for a free, hands-on demonstration of basic yard care and planting techniques. Not sure how to use mulch? Worried that you're not planting to the right depth? Want to know how an aerator works? Here's your chance to get the "dirt" on natural yard care. Work with the experts and get answers to your questions. Planting and mulching demonstrations will begin at 10 a.m. Aeration demonstration will begin at noon. This is an outdoor, hands-on workshop. Dress for the weather and be prepared to play in the dirt!

Centennial Park, 1129 208th St SE, Bothell

# September 2018 e-News

## Pollution Prevention Week

Celebrate Pollution Prevention Week Sept. 17 – 23! Simple actions like reporting spills, taking your car to a commercial car wash, fixing vehicle leaks, and much more can make a world of difference in preventing pollution. Take a pledge to reduce pollution and learn more at [www.bothellwa.gov/pollutionpreventionweek](http://www.bothellwa.gov/pollutionpreventionweek).



## Salmon “SEEs on”

September is here, which is a perfect time to start looking for salmon in North Creek. Look for Chinook in September, Sockeye in October, and Coho in November as they migrate up the creek. Visit one of many salmon “hot spots” in King County on your own, or sign up for a guided walking tour along North Creek with a local salmon expert. More information at [www.bothellwa.gov/salmon](http://www.bothellwa.gov/salmon).



## Natural Yard Care Workshops

Come soak up some knowledge at our free natural yard care workshops this October! From building healthy soil to choosing the right plants for your site to learning basic planting techniques, everyone can learn something new. Sign up for one, two, or all three workshops at [www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc).





## What's New in Surface Water?

### Fall 2018

*City of Bothell's Surface Water Division works to protect our local streams through storm system inspection, maintenance, construction oversight, stream monitoring, and education and outreach opportunities to foster healthy watershed stewardship.*

Fall is almost here, the rains are returning, and we're working hard to protect our streams and storm drains. It's also a busy time for workshops and community events! Read on to find out how you can get involved with [Surface Water \[http://www.ci.bothell.wa.us/442/Surface-Water-Management\]](http://www.ci.bothell.wa.us/442/Surface-Water-Management) this fall.



### Salmon SEEson and North Creek tours

Every fall we celebrate Salmon SEEson, the time when salmon return to their homes to spawn in local streams and creeks. One of Bothell's salmon experts and retired NOAA research fisheries biologist, Orlay Johnson, is offering several free guided tours of North Creek to look for and learn

about salmon. Sign for the Sept. 23 or Oct. 14 tour at [www.bothellwa.gov/salmontours](http://www.bothellwa.gov/salmontours) [http://www.bothellwa.gov/salmontours].

### Salmon Watcher program

As many of our dedicated Salmon Watchers know by now, the Salmon Watcher program is still in limbo. Several years ago, King County lost the funding necessary to operate and maintain the regional database for salmon sightings, and smaller jurisdictions like ours are unable to do it on our own. If you are a past Salmon Watcher, we sincerely thank you for your years of service. We encourage you to continue monitoring the streams and sending us your data sheets each month. The program may be inactive right now, but we don't want to lose any of the valuable information you collect each year. You can get more data sheets by clicking "Salmon Watcher Program" at [www.bothellwa.gov/salmon](http://www.bothellwa.gov/salmon) [http://www.bothellwa.gov/salmon].



Please keep letting us know right away whenever you see spills, blockages and any other harmful issues in our streams by calling 425-806-6750.



### Natural Yard Care workshops

Natural Yard Care is taking root in Bothell's neighborhoods, and you're invited to join! We are partnering with Tilth Alliance to offer a free series of two workshops and one hands-on demonstration this October. Whether you're a

new homeowner starting from scratch or a seasoned gardener planning a complete yard overhaul, Natural Yard Care offers something for everyone. Check out the workshop schedule and register at [www.bothellwa.gov/nycworkshop](http://www.bothellwa.gov/nycworkshop) [http://www.bothellwa.gov/nycworkshop].

### Volunteer event at Parr Creek

The banks of Parr Creek have several hundred young plants that could use some mulch to help them survive. They were planted several years ago as part of a restoration project, and right now each plant still has a blue tube around it

designed to protect it. Now that the plants have established their roots and have had some time to grow, King Conservation District is ready to remove the blue tubes. But first, we want to add mulch around the outside of each tube to give the plants some extra protection and nourishment. Want to volunteer to help? Sign up for the Oct. 20 event at [www.bothellwa.gov/parrcreek](http://www.bothellwa.gov/parrcreek) [<http://www.bothellwa.gov/parrcreek>].



### Surface Water wants to hear from you

We update our Stormwater Management Program each year and ask Bothell residents and businesses to review the plan and give us your feedback. We value your suggestions and consider them when we are planning our programs each year. It's also a great way for you to learn about what we're doing and how you can get involved.

Check out our current plan at [www.bothellwa.gov/2018swmp](http://www.bothellwa.gov/2018swmp) [<http://www.bothellwa.gov/2018swmp>]. Then let us know what you think by filling out our online form at [www.bothellwa.gov/SWMPfeedback](http://www.bothellwa.gov/SWMPfeedback) [<http://www.bothellwa.gov/SWMPfeedback>] or emailing Christi Cox, Surface Water Program Coordinator, at [christi.cox@bothellwa.gov](mailto:christi.cox@bothellwa.gov) [<mailto:christi.cox@bothellwa.gov>].

[Learn more about City of Bothell's Surface Water Division](http://www.ci.bothell.wa.us/442/Surface-Water-Management) [<http://www.ci.bothell.wa.us/442/Surface-Water-Management>].

**Report spills 24/7 by calling 425-806-6750.**

 Share on Facebook

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Help Celebrate

# POLLUTION

# PREVENTION

**WEEK** SEPTEMBER 17-23, 2018

*This year we celebrate 28 years of pollution prevention efforts by joining in "National Pollution Prevention Week."*

**E**ach year the United States produces millions of tons of pollution and spends tens of billions of dollars dealing with it.

Residents, industry, and government have significant opportunities to reduce or prevent pollution at the source through cost-effective changes in daily habits, production, operation, and raw materials use.

We often don't realize the opportunities for reducing sources of pollution because existing regulations, and the industrial resources they require for compliance, focus on treatment and disposal rather than stopping pollution at its source.

## Things you can do to reduce pollution at home:



Take your car to a commercial car wash



Check your vehicle for leaks and get it fixed right away



Pick up your pet waste



Use little to no chemicals on your lawn and garden

**Puget Sound**  
**Starts Here**



FREE!

It's

# Salmon Seeson

again

See salmon  
—on your own or with help from naturalists—  
in King County watersheds!



## August - November 2018

To find out where to view  
spawning salmon this fall go to  
[www.kingcounty.gov/salmon](http://www.kingcounty.gov/salmon) & click on Salmon SEEson!  
Or call 206-477-7574.



# It's *Salmon Seeson* again

Go to [www.kingcounty.gov/salmon](http://www.kingcounty.gov/salmon) & click on **6** Salmon SEEsion! or call 206-477-7574

**FREE!**



**August - November 2018**  
See salmon—on your own or with help from naturalists—in King County watersheds!

**2018 salmon-spotting site. See reverse for salmon-spotting details!**

1808\_9137m\_2018SalmonSeesonFlyer1





### CHITTENDEN LOCKS, SEATTLE

Watch salmon migrate up the fish ladder at the Chittenden Locks in Ballard mid-June through September. Naturalists provide daily talks following free one-hour tours. Call **206-783-7059** or **206-789-2622 x214** or visit [www.ballardlocks.org/salmon-at-the-locks.html](http://www.ballardlocks.org/salmon-at-the-locks.html).



### DUWAMISH RIVER, TUKWILA

Look for salmon on the Green/Duwamish River from late July through November at three viewing areas. Learn more at [www.DuwamishAlive.org](http://www.DuwamishAlive.org) or email [info@Duwamishalive.org](mailto:info@Duwamishalive.org). Codiga Park is at 12585 50th Pl. S., North Wind's Weir is at 2914 S. 112th St., and Tukwila Gardens is at 11269 E. Marginal Way S.



### SAMMAMISH RIVER TRAIL, REDMOND

Spot adult coho, sockeye, and Chinook salmon in September and October as they migrate up the Sammamish River to their spawning grounds in Bear Creek. Contact Peter Holte at **425-556-2822** or [pholte@redmond.gov](mailto:pholte@redmond.gov) for more info.



### ISSAQUAH SALMON HATCHERY, ISSAQUAH

See salmon return to Issaquah Creek daily from September through November. Docents from Friends of the Issaquah Salmon Hatchery (FISH) lead drop-in tours Saturdays and Sundays from Sept. 15 to Nov. 11, 11 a.m. & 1 p.m., and on some weekday evenings. Other tours available by appointment at **425-392-1118** or [www.issaquahfish.org/tours](http://www.issaquahfish.org/tours). The hatchery is at 125 W. Sunset Way in Issaquah.



### ISSAQUAH CREEK, ISSAQUAH

See salmon return at two new parks in Issaquah September through November. Confluence Park is at 595 Rainier Boulevard N. at the confluence of the East Fork and mainstem of Issaquah Creek. And Salmon Run Nature Park is at 930 5th Ave. NW, along Issaquah Creek. Learn more at <http://www.issaquahwa.gov/confluencepark> or <http://www.issaquahwa.gov/salmonrun>. For questions, contact [education@issaquahfish.org](mailto:education@issaquahfish.org).



### NORTH CREEK, BOTHELL

Watch for Chinook in September, sockeye in October, and coho in November on North Creek at 19333 North Creek Parkway in Bothell. For more info, contact Christi Cox at **425-806-6790** or [christi.cox@bothellwa.gov](mailto:christi.cox@bothellwa.gov).



### WHITNEY BRIDGE ON THE GREEN RIVER, NEAR AUBURN

See Chinook and pink salmon in September and October, chum October through December, and coho in November and December. Head to SE Green Valley Road and 212th Way SE (east of Auburn). For more info, call Mid-Sound Fisheries at **206-529-9467**.



### ISSAQUAH CREEK, LAKE SAMMAMISH STATE PARK

Visit Lake Sammamish State Park to view salmon migrating up Issaquah Creek. Best chance of seeing fish is through October. Park free with your Discover Pass. Learn more at <http://parks.state.wa.us/533/Lake-Sammamish> or [www.lakeSammamishfriends.org](http://www.lakeSammamishfriends.org).



### SOOS CREEK SALMON HATCHERY, NEAR AUBURN

See Chinook salmon in mid-September and coho in mid-October. Open every day from 8 a.m. to 4 p.m. Call **253-931-3950** to learn more. 13030 Auburn-Black Diamond Road, on Soos Creek a mile upstream of the Green River.



### BEAR CREEK, REDMOND

View sockeye and Chinook salmon on Bear Creek from late September to mid-November by visiting the ROSE (Redmond Organization of Shared Environments) self-guided trail. For more info, or to schedule a group tour, call KIS Farm at **425-558-0990** or [lyhussey@comcast.net](mailto:lyhussey@comcast.net). Visit the trail at 12526 Avondale Rd. NE in Redmond every day during business hours.



### LONGFELLOW CREEK, WEST SEATTLE

Watch for coho salmon in October through December and chum in November as they migrate up Longfellow Creek. Start at Dragonfly Garden (28th Avenue SW and SW Dakota St., Seattle) and walk the trail south along the creek. For more info, contact Kathryn at **206-297-7002** or [Kathryn@pugetsoundkeeper.org](mailto:Kathryn@pugetsoundkeeper.org).



### KELSEY AND COAL CREEKS, BELLEVUE

Salmon may return to Bellevue streams in October. Call or email for updates at **425-452-5200** or [streamteam@bellevuewa.gov](mailto:streamteam@bellevuewa.gov).



### BEAR CREEK, WOODINVILLE

View salmon along Bear Creek in Woodinville with Water Tenders volunteers on October 6, 7, 13, 14, 20, 21 from 1 p.m. to 4 p.m. and October 10 and 17 from 3 p.m. to 6 p.m. For more info, contact Susan Wilkins at **206-437-8754** or [susan@watertenders.org](mailto:susan@watertenders.org).



### CEDAR RIVER, NEAR RENTON

On Oct. 6, 7, 13, 14, 20, 21, 27, and 28, see spawning salmon at several sites along the Cedar River near Renton. Volunteer naturalists will be available 11 a.m. to 4 p.m. each day at Renton Library, Cedar River Park, Cavanaugh Pond, and Landsburg Park and Dam. Contact the Seattle Aquarium at **206-792-5851** or [www.seattleaquarium.org/salmon-journey](http://www.seattleaquarium.org/salmon-journey) for details.



### PIPER'S CREEK AT CARKEEK PARK, SEATTLE

See returning chum and coho on weekends from Nov. 3 to Dec. 2, from 11 a.m. to 2 p.m., salmon stewards will be on hand to answer questions. Welcome salmon home on Sunday, Nov. 18, 11 a.m. to 2 p.m. For more details, call 206-733-9697, email [bill.malatsky@seattle.gov](mailto:bill.malatsky@seattle.gov) or visit Facebook <http://tinyurl.com/3fe6a78>.



### EBRIGHT, LEWIS, AND LAUGHING JACOBS CREEKS, NEAR LAKE SAMMAMISH

See the little red kokanee salmon between early November and late January. Lake Sammamish is the only place to see kokanee within 90 miles of Seattle. Call **206-477-4746** to make sure fish are visible. Self-guided locations are Ebright Creek at the East Lake Sammamish Trail in Sammamish, Lewis Creek at 185th Place SE in Issaquah, and Laughing Jacobs Creek by Lake Sammamish State Park.



### MILLER AND WALKER CREEKS, NORMANDY PARK

Spot coho mid-October through mid-November and chum mid-November through early-December returning to Miller and Walker Creeks. Salmon can be seen where Miller Creek intersects 13th Ave SW and where Walker Creek intersects 12th Ave SW. Call Matt Goehring, Miller-Walker basin steward at **206-263-6826** for updates on recent salmon activity.



### CHINOOK BEND NATURAL AREA, TOLT MACDONALD PARK, AND SNOQUALMIE VALLEY TRAIL, CARNATION

View returning adult salmon from mid-September through October at three locations in the Snoqualmie-Skykomish Watershed. Salmon can be seen at the Chinook Bend Natural Area, at Tolt MacDonald Park, and from the Snoqualmie Valley Trail foot bridge over the Tolt River. For more info, view the King County Parks' websites for each area.

#### MORE INFO?

Visit [www.kingcounty.gov/salmon](http://www.kingcounty.gov/salmon)

and click on Salmon SEEson. Or call **206-477-7574**.

Our website also has great links to info on protecting salmon and their habitat. And remember, using water wisely helps people, salmon and wildlife!

Visit [www.savingwater.org](http://www.savingwater.org) to learn more.

# Orlay to host North Creek tours

Attendees will learn about local salmon varieties in addition to the area's watershed.

Wednesday, September 19, 2018 1:30pm | LIFE

Bothell salmon expert Orlay Johnson will host two tours at North Creek Sept. 23 and Oct. 14.

Attendees will look for Sockeye, Kokanee, Coho and maybe even Chinook salmon swimming up North Creek and building their egg nests, called redds.

Johnson will share his knowledge about the fish and the watershed.

Each tour begins at 10 a.m., meeting at the trail along the North Creek dikes. There is parking near the North Creek Trail in the Vertafore parking lot (11724 NE 195th St.) or park at the Northshore YMCA (11811 NE 195th St.).

For attendees who park at the YMCA, cross Northeast 195th Street on the mid-block crosswalk and continue walking between the cottage and business parking lot to reach the trail at the top of the dike. They can walk up the hill or use the stairs to the left in the business parking lot.

Attendees are reminded to dress for the weather. Stream visits will happen rain or shine. The group will walk for about two miles on packed gravel or dirt trails after the initial hill to the trail. The path is easy to walk, but there are steps to do go down to the water, so good walking shoes are recommended. The path is relatively easy to walk, but it can be slippery and attendees may need to be right on the water's edge to see the fish.

All ages are welcome, from children to all adults.

For more information, visit [tinyurl.com/yczvveyw](http://tinyurl.com/yczvveyw)

# It's *Salmon Seeson* again



Join local salmon expert Orlay Johnson to find Sockeye, Kokanee, Coho, and maybe even Chinook salmon swimming up North Creek and building their egg nests, called redds. Learn from Orlay about the fish and the watershed.

## TOUR NORTH CREEK WITH A LOCAL SALMON EXPERT

**WHO:** All ages are welcome, from children to all adults.

**WHERE:** Meet at the trail along the North Creek dikes. Park at the Northshore YMCA, cross NE 195th Street on the mid-block crosswalk, and continue walking between the cottage and business parking lot to reach the trail at the top of the dike. You can walk up the hill or use the stairs to the left in the business parking lot.

OCT. 14  
@ 10 A.M.

*Sign up online!*

[www.bothellwa.gov/salmonontours](http://www.bothellwa.gov/salmonontours)

# North Creek Tour and Salmon Watching



## Where to park and meet

### YMCA

You may park at the Northshore YMCA (11811 NE 195<sup>th</sup> St) and walk north across the mid-block crosswalk on NE 195<sup>th</sup> St.

Continue walking between the cottage and the business parking lot to reach the trail at the top of the dike. You can walk up the hill or use the stairs to the left in the business park.

### Vertafore

You may also park at the foot of the dike behind the Vertafore building (11724 NE 195<sup>th</sup> St). Use the stairs or the trail next to the retention pond to walk up to the meeting spot on the North Creek Trail.

Sign up for a tour at [www.bothellwa.gov/salmon tours](http://www.bothellwa.gov/salmon tours)



FOR YOUTH DEVELOPMENT®  
FOR HEALTHY LIVING  
FOR SOCIAL RESPONSIBILITY

# SALMON IN NORTH CREEK

## Stream Visit for Y Members and the Community

Join retired NOAA Research Fisheries Biologist (and Y member) Orlay Johnson and friends to find Sockeye, Kokanee, Coho, and maybe even Chinook salmon swimming up North Creek and building their egg nests, called redds.

Learn from Orlay and other marine educators about the fish and the watershed. Orlay is also a Seattle Aquarium Beach Naturalist Supervisor and diver in the Aquarium's dome.

See <http://www.govlink.org/watersheds/8/action/salmon-season/northcreek.aspx> for complete information.

### WHEN

Sunday, September 23, 2018  
and  
Sunday, October 14, 2018

10 am



Meet Orlay at the stream.

### WHERE

Meet at the trail along the North Creek dikes.

Park at the YMCA, cross NE 195th Street on the mid-block cross walk and continue walking between the cottage and business parking lot to reach the trail at the top of the dike.

You can walk up the hill or use the stairs to the left in the business parking lot.

### WHO

All ages are welcome. Those under 18 must be accompanied by parent or guardian.

### HOW TO PREPARE

Dress for the weather, stream visit goes rain or shine.

Group will walk for about 2 miles on packed gravel or dirt trails after initial hill to trail.

### REGISTRATION

These events are free and open to community members.

Please register so the leaders know how many to expect.

Go to [www.seattleyymca.org](http://www.seattleyymca.org), call 425-485-9797, or register in person at the YMCA.

### QUESTIONS

Contact Heather Steele at [hsteele@seattleyymca.org](mailto:hsteele@seattleyymca.org) or call 425 485 9797.

#### NORTHSHORE YMCA

11811 NE 195th ST, Bothell WA 98011

P 425 485 9797 F 425 486 7757 [seattleyymca.org](http://seattleyymca.org)

**Everyone is welcome. Financial assistance is available.** The YMCA of Greater Seattle strengthens communities in King and south Snohomish counties through youth development, healthy living and social responsibility.

## Salmon "SEEsion" is here!



### Salmon "Seeson"

Each fall, salmon make the long trek to spawn in streams and rivers across the Puget Sound region. Consider taking a few minutes to watch their extraordinary journey by checking out one of more than [a dozen locations](#) around the area where you can see fish. Some locations may even have volunteers on hand to help you spot the fish and to answer your questions.



### Local salmon hot spot

Salmon love North Creek! Look for Chinook in September, Sockeye in October, and Coho in November as they migrate up [North Creek](#).

### Want to venture farther?

Check out some of the most popular [salmon viewing areas](#) throughout Puget Sound.

Select Language ▼

Powered by [Google Translate](#)

## Local salmon experts Orlay Johnson and Jim Myers explain the challenges and triumphs of salmon in North Creek.



**Video credit:** Laura Howard, Miami University, 2016

### Contact us

#### Christi Cox

Surface Water Program Coordinator

[Email](#)

#### Spill Hotline

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any storm drains or local streams.

### What are the salmon doing in the creeks?

After making their way to the Pacific Ocean, salmon will stay there for two to four years. In the fall, they return to the stream they were born in to spawn (deposit and fertilize eggs.)

Select Language ▼

Powered by [Google Translate](#)



### **Are you a Salmon Watcher who wants to share your knowledge?**

We aren't offering [Salmon Watcher](#) training this year because [the program no longer has funding](#), but if you've already taken the training and would like to volunteer as a guide during Salmon "SEEsion," please [contact us](#) with your availability. We're looking for several volunteers to talk to visitors along North Creek, and you can pick the date and time that works best for you.

Visit [King County's website](#) for more information about the history of the [Salmon Watcher Program](#) and how you can stay involved in protecting local salmon.

# Salmon Watcher Program

## Salmon Watcher changes for 2018



### **Thank you to all our dedicated volunteers!**

As many of you probably know by now, the Salmon Watcher program is still in limbo. Several years ago, King County lost the funding necessary to operate and maintain the regional database for salmon sightings, and smaller jurisdictions like ours are unable to do it on our own.

If you are a past Salmon Watcher, we sincerely thank you for your years of service.

We encourage you to continue monitoring the streams and sending us your data sheets each month. The program may be inactive right now, but we don't want to lose any of the valuable information you collect each year in case the program becomes active again sometime in the future.

As always, please continue to let us know whenever you see an illicit discharge by calling our Spill Hotline (24/7) at **425-806-6750**. You're helping keep our streams clean!

### **Want to share your salmon knowledge?**

If you're a seasoned salmon watcher and would like to volunteer as a guide during Salmon "SEEsion," please [contact us](#) with

Select Language ▼

Powered by [Google Translate](#)

your availability so we can let the community know. We're looking for several volunteers to talk to residents along North Creek, and you pick the date and time.



## History of the Salmon Watcher Program

The [Salmon Watcher Program](#) was designed to help residents learn about our local salmon, their habitat, and what we can do to help them. Participating residents attended a training session, signed up to watch a stream near their home or work, and shared their findings with us. The information they gave us played a big part in making local decisions, finding fish barriers, and detecting spills.

Visit [King County's website](#) for more information about the history of the [Salmon Watcher Program](#) and how you can stay involved in protecting local salmon.

## Contact us

### Christi Cox

Surface Water Program Coordinator

[Email](#)

### Public Works

#### Physical Address

City Hall  
18415 101st Ave NE  
Bothell, WA 98011

### Spill Hotline

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any storm drains or local streams.

## Documents

- [2018 Salmon Data Sheet \(PDF\)](#)
- [2018 Salmon Data Sheet \(DOC\)](#)

Select Language ▼

Powered by [Google Translate](#)

- [2016 Salmon Watcher Training Slideshow \(PDF\)](#)

Select Language ▼

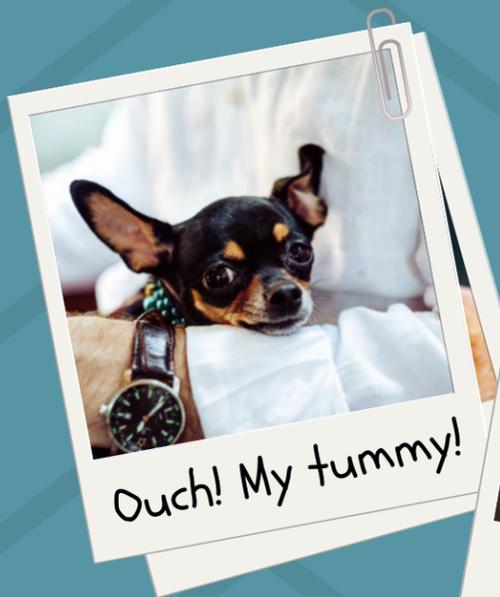
# ATTENTION DOGS!

Want to be a good doggie?

## PLEASE STAY AWAY FROM THE RIVER.

Salmon are spawning and laying their eggs in the river. Your paws could kill the baby salmon.

These salmon may smell tasty, but they're not. Eating them could make you very sick - you could even have to go to the vet.



City of Bothell™

## WOOF!

Parks and Recreation  
425-806-6760

[recreation@bothellwa.gov](mailto:recreation@bothellwa.gov)



# VOLUNTEER OPPORTUNITIES



## EVENTS

- Fourth of July
- MLK Day of Service
- Sustainamania

## PROGRAMS

- Adopt-a-Drain
- Storm drain stenciling

## COMMUNITY OUTREACH

- Doorhangers
- Neighborhood canvassing

## STEWARDSHIP

- Invasive species removal
- Litter control
- Pet waste removal
- Planting and restoration

## IN-OFFICE

- Data entry
- Materials preparation
- Proofreading
- Storage organization
- Website review



City of Bothell™

**Volunteer**

**Event**





## Form Center

By [signing in](#) or [creating an account](#), some fields will auto-populate with your information and your submitted forms will be saved and accessible to you.

## Volunteer with Public Works

### Volunteer with Public Works

Complete this form and we'll notify you about any upcoming volunteer opportunities with Public Works that you may be interested in. If you're volunteering with kids, you must have at least one adult supervisor for every three kids.



**Your name\***

**Your email\***

**Your daytime phone number\***

**Are you at least 18 years old?\***

- Yes
- No

**Are you volunteering as an individual or as part of a group?\***

- Individual
- Group

Select Language ▼

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## **Volunteers under age 14 need to bring this waiver and a copy of their insurance card with them.**

[Download the waiver](#)

Volunteers over age 14 must fill out and turn in the waiver to the Volunteer Coordinator at the event.

### **What volunteer opportunities are you interested in?\***

- Adopt-a-Drain
- Neighborhood canvassing
- Scout project
- Character costumes at events
- Outreach event booth staff
- Solid waste/recycling audits
- Doorhangers
- Pet waste research
- Sustainamania
- Face painting at events
- Picking up litter
- Website review
- Fourth of July parade
- Planting
- All of the above
- In-office work (data entry, filing, etc.)
- Restoration and replanting
- Other
- Invasive species removal

### **Volunteer Release of Liability Agreement\***

I acknowledge that there may be special dangers and risks inherent in my voluntary participation in activities sponsored by the City of Bothell. These risks may be apparent or hidden, known or unknown. These risks are to be taken into consideration in deciding to volunteer, whether my participation is just one time or on multiple occasions. These risks include the possibility of physical injury, loss, death, damage, or other consequences that may arise or result directly from any activity in which I may participate in during this program/project. I desire to participate having determined of my own free will and personal assessment of the risks that I am qualified to participate and willing to accept the risks involved. In consideration of the privilege of participating in this program/project and utilizing any necessary tools, or accessing any public or private property, I hereby assume all risk of personal injury, loss, death, damage, or other consequences. I also forever discharge and waive any right of recovery from, or to bring a claim or lawsuit against, the owners and/or developers of private property which I may need to occupy or cross to access a stream, wetland, field, or project site; and the City of Bothell, its officials, employees, contractors, and other volunteers, agreeing to hold them harmless from any and all claims of negligence for any personal injury, loss, death, damage, or other consequences that I may suffer participating as a volunteer working on activities sponsored by the City of Bothell.

- I agree**
- I do not agree**



## Thanks for your willingness to volunteer!

If opportunities come along that match your interests, we'll contact you by email with as much notice as possible to see if you're available to volunteer.

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[Privacy](#) - [Terms](#)

Receive an email copy of this form.

### Email address

This field is not part of the form submission.

\* indicates a required field

Select Language ▼

# Volunteer with Public Works

## Ways to get involved

The Public Works Department offers many volunteering opportunities. Let us know which one is right for you!

### Adopt-a-drain

Help remove debris from storm drains in your neighborhood during the fall and winter months. You can adopt as many drains as you feel comfortable handling (minimum 4). Help promote community pride, and foster a sense of environmental stewardship. Remember - nothing but rain down the drain! Learn more and sign up.

### Community events

Are you good at face painting? Are you willing to be a symbol of sustainability by wearing a mascot or character costume? We'd love your help at annual events like our Freedom Festival and Sustainamania.

### In-office work

We're looking for volunteers to help with in-office tasks like preparing materials for events, data entry, organization projects, and website review.

### Outreach opportunities

We have valuable information that needs to be passed around to all of our citizens. You can do this kind of volunteering at local events like sports games, parades, and community festivals.

The graphic features the City of Bothell logo and 'PUBLIC WORKS' text at the top. Below this, the words 'VOLUNTEER OPPORTUNITIES' are written in large, bold, blue letters. To the right of the text are five stylized hands in different colors (green, blue, red, orange, light blue) reaching upwards. Below the text and hands is a row of six small images showing various volunteer activities: a group of people, a person painting a face, a person at a table, a person working outdoors, a person working at a computer, and a person working at a desk. Below the images are four colored boxes containing text: a green box for 'EVENTS' (Fourth of July, MLK Day of Service, Sustainamania), a blue box for 'PROGRAMS' (Adopt-a-Drain, Storm drain stenciling), a green box for 'COMMUNITY OUTREACH' (Doorhangers, Neighborhood canvassing), and a blue box for 'STEWARDSHIP' (Invasive species removal, Litter control, Pet waste removal, Planting and restoration). To the right of the 'COMMUNITY OUTREACH' box is another blue box for 'IN-OFFICE' (Data entry, Materials preparation, Proofreading, Storage organization, Website review).

**EVENTS**

- Fourth of July
- MLK Day of Service
- Sustainamania

**PROGRAMS**

- Adopt-a-Drain
- Storm drain stenciling

**COMMUNITY OUTREACH**

- Doorhangers
- Neighborhood canvassing

**STEWARDSHIP**

- Invasive species removal
- Litter control
- Pet waste removal
- Planting and restoration

**IN-OFFICE**

- Data entry
- Materials preparation
- Proofreading
- Storage organization
- Website review

Select Language ▼

Powered by Google Translate

## Planting and restoration events

Each year Bothell has planting events to help restore and beautify our parks, trails, and native landscapes. Bring your family and get to know neighbors and your local soils. Events to remove invasive species, replant, and add mulch typically take place in the fall and winter months.



## Pet waste research

We're looking for open-minded citizens to help us "count the piles." This valuable research helps us to determine the pet waste problem areas in our neighborhoods and direct our outreach appropriately. You can do this any time of the year and it's a great research project for elementary students.

## Scout projects

If your pack already has a project in mind, we can usually work with you to help make it happen. And if you need some guidance, our Parks Department usually has a list of projects you can help with.

## Want to sign up as a volunteer?

If you or your group are interested in participating in any of these programs, please **fill out this form** so we can notify you of upcoming opportunities that fit your interests.

# Every employee is responsible for reporting and preventing **STORMWATER POLLUTION.**

Seriously! It's written in City Personnel Policy 10.14.

**1**

Report any spill that reaches a street or storm drain.

**SPILL HOTLINE**   
**425-806-6750**

**2**

Fuel and wash City vehicles responsibly, and report leaks.



**3**

Provide any requested records to Surface Water staff each year.



# Report spills



425-806-6750



# Report spills

## Why report a spill?

Spills to our roads and storm drains are carried - untreated - through our stormwater system to local streams and other bodies of water. From there, they can cause serious problems for people, pets, and the environment.

**Spill Hotline**  
**425-806-6750**

## How to report a spill

You can call the Spill Hotline at **425-806-6750** or [report spills online](#). We only monitor online reports during regular business hours (Monday through Friday from 7 a.m. to 5 p.m.), but the Spill Hotline is answered 24/7.

**If the spill is a direct hazard to human or environmental health, call 911 .**



### When to call the Spill Hotline

Call the Spill Hotline day or night at **425-806-6750**. The hotline is staffed 24/7.



### When to use the online spill report form

Use the [online spill report form](#) to tell us about a non-emergent spill. Staff receives and reviews online reports Monday through Friday from 7 a.m. to 5 p.m.

## Examples of what to report

- Vehicle fluids leaking onto the street
- Soapy water entering the street from washing cars, sidewalks, buildings, or awnings
- Paint, motor oil, or other contaminant on the street

Select Language ▼

Powered by [Google Translate](#)

- Restaurants dumping food or grease into storm drains
- Mobile businesses dumping wastewater into storm drains (from things like carpet cleaning)
- Blowing debris or yard waste into the street
- Chlorinated swimming pool water drained into the street
- Landscaping dirt piles in the street
- Mud tracked out into the street or muddy water entering the street, typically from a construction site



**Thanks for helping protect our streams!**

# Spills and Drainage

## How to report a spill or illicit discharges

Depending on the circumstance of the spill, you can either call the Spill Hotline at **425-806-6750** or report a spill using our online form. [Learn which method to use.](#)

## Why reporting spills matters

Spills to our roads and storm drains are carried through our stormwater drainage system to local streams where they cause problems for people, pets, and the environment. We need to know about spills so we can try to contain them before they reach our local streams and other bodies of water.

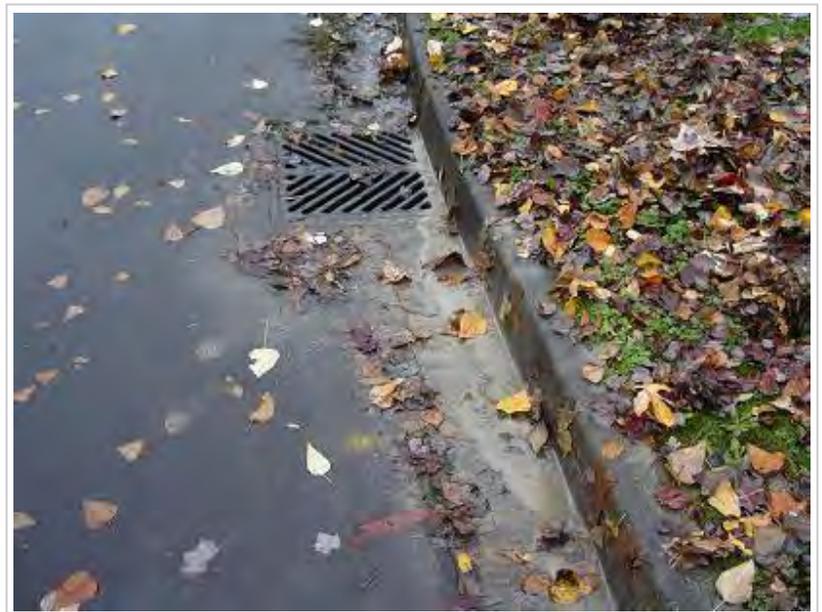
**Spill Hotline**  
**425-806-6750**

## Drainage inspections

We conduct stormwater drainage inspections as part of our ongoing program and upon request.

## Report a drainage issue

[Submit an online form](#) to tell us about your drainage concern. When we receive a report about a drainage issue, we inspect the location thoroughly and promptly to help resolve any issues to the best of our ability.



Select Language ▼

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## FAQs

- [How do I report a drainage issue?](#)
- [How do I report a spill or illicit discharge?](#)
- [Who do I call if my property is flooding?](#)

[VIEW ALL](#)

# Flood Prevention

Fallen leaves can block storm drains and lead to ponding and localized flooding in your neighborhood. You can help prevent this from happening by raking leaves and keeping them out of your street and storm drains. Here are some leaf-raking tips:

- Avoid raking leaves near the street where they can wash or get blown into nearby storm drains. Instead, collect them in your yard waste or compost bin. [Learn how to make compost out of leaves.](#)
- Use leaves as mulch on garden beds and landscaped areas.
- Watch for traffic when clearing leaves out of storm drains. Work from the curb, not in the street, and make sure an adult supervises any children who are helping.
- Make sure any landscaping companies hired by your Home Owners Association refrain from blowing leaves into the street.
- Help out your whole neighborhood by joining the [Adopt-A-Drain program](#) by agreeing to keep at least four nearby storm drains clear during the rainy season.
- Raking not doing the trick? Report clogged storm drains and flooding to **425-488-0118** or [www.bothellwa.gov/car](http://www.bothellwa.gov/car). If the flooding is an emergency, call **911**.

Click to enlarge



## Stay safe in a flood

Because of how much rainfall we get in the Pacific Northwest, flooding is a common regional problem. If your home floods, prepare ahead of time to reduce damage and keep your family safe:

## Flooded roadway

Select Language ▼

Powered by [Google Translate](#)



- Store household chemicals at higher elevations to keep them out of flood waters, especially in garages, sheds, and basements.
- Make sure any underground storage tanks are fully sealed and secure.
- Have a plan and make an emergency kit.
- Have check valves installed in building sewer traps to prevent flood waters from backing up in sewer drains.
- Stay out of floodwaters, as they contain many things that may harm health.
- After a flood, [learn how to get rid of mold](#).

[Learn more flood safety tips](#).

# Stormwater Inspections and Maintenance

## Annual Inspections

Each year we conduct routine inspections for both public and private stormwater systems within the Bothell's city limits. We inspect control structures, retention ponds, detention and drainage systems to be sure they meet standards and are in proper working order.



## FAQs

- [What is a stormwater system?](#)
- [Why do I need an inspection?](#)
- [Why should I maintain my system?](#)

## New maintenance standards

The City adopted a new set of maintenance standards from King County, effective December 31, 2016 for maintaining stormwater systems in Bothell. [View the new standards.](#)

## Does your drainage system need maintenance?

See a [list of private contractors](#) that are licensed to do that kind of work in Bothell's city limits, and [learn what you should do](#) before hiring one.

## Questions

If you have questions about your stormwater system, [check here for answers](#). Or you can [contact our surface water inspector](#).

- [Where does something end up after it goes into my storm system?](#)
- [How long do I have to complete the maintenance requirements?](#)

Select Language ▼

Powered by [Google Translate](#)

- [What information do I need to provide to the City?](#)
- [Can I clean the system myself?](#)
- [I have questions about my stormwater system. Who do I contact?](#)
- [What is a bioswale?](#)
- [What do I do if the storm drain in front of my house is flooding?](#)

[VIEW ALL](#)

## Contact us

Senior Surface Water Inspector

[Email](#)

## Public Works

### Physical Address

City Hall

18415 101st Ave NE

Bothell, WA 98011

## Related Documents

### About stormwater maintenance

- [Bothell Stormwater Maintenance Standards \(PDF\)](#)
- [Inspection Brochure \(PDF\)](#)
- [Vector Vendor List \(PDF\)](#)

### About bioswales

- [Basic bioswale tip sheet \(PDF\)](#)

Select Language ▼

# Natural Yard Care

SKIP THE CHEMICALS

## WHAT IS NATURAL YARD CARE?

Natural yard care means working with nature to take care of our yards and gardens. It requires less water, less chemicals, and less time than conventional yard care. Learn the five easy steps to natural yard care at [naturalyardcare.org](http://naturalyardcare.org).

## WHAT'S THE PROBLEM WITH PESTICIDES AND FERTILIZERS?

When we use traditional methods like pesticides and fertilizers to take care of our yards, we end up wasting water, producing excess yard



waste, and overusing chemicals. Pesticides include some of the most hazardous chemicals commonly used in and around the home. Products that kill insects, weeds, bacteria and fungi may be hazardous to children, pets, wildlife, and beneficial insects like bees, butterflies, and ladybugs. Rain and irrigation systems wash those pesticides off your yard and plants and carry them to storm drains and local streams.

## HOW TO KEEP YOUR YARD HEALTHY

By making simple changes in how we care for our yards, we can have beautiful landscapes that are healthier for families, pets, wildlife, and our community.



- **Use compost and mulch.** Your garden will be healthier and it will reduce your water bills and yard work.
  - **Use yard chemicals sparingly, if at all.** Read labels carefully to avoid overusing chemicals. Learn how to manage yard and garden pests naturally at [growSMARTgrowsafe.org](http://growSMARTgrowsafe.org).
  - **Be careful when and where you use yard chemicals.** Avoid applying chemicals near driveways and sidewalks, and never use them when rain is in the forecast.
  - **Practice natural yard care.** Leave grass clippings on the lawn for fertilizer and use compost or nontoxic yard care products.
- **Landscape with native plants.** Use plants that require less watering, fertilizers, and pesticides.
  - **Retain trees or plant new trees in your yard.** Trees help slow runoff, reduce flooding, and improve property value.

## LEARN MORE

Visit [naturalyardcar.org](http://naturalyardcar.org) and [growSMARTgrowsafe.org](http://growSMARTgrowsafe.org) to learn more about building and keeping a healthy yard.



# Natural Yard Care is taking root

in Bothell's neighborhoods...



City of Bothell™



## And we invite you to be part of it!

Bothell's Natural Yard Care program is a free series of two workshops and one hands-on demonstration, presented by **Tilth Alliance**. Whether you're a new homeowner starting from scratch or a seasoned gardener planning a complete yard overhaul, Natural Yard Care offers something for everyone.

Check out the Natural Yard Care Workshop Schedule on the back of this page for the dates and details.

## What you will get when you participate

- ✓ Expert advice about natural yard care techniques from gardening professionals
- ✓ Hands-on demonstrations for planting, mulching, and aerating methods
- ✓ Chances to win prizes like natural yard care products, a one-day aerator rental, and a free in-person yard consultation with a professional landscape architect

## How to sign up

Reserve your spot by Sept. 16 at [www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc). Whether you can attend one, two, or all three workshops, we look forward to seeing you! We'll email you a reminder the day before each class you sign up for.

Sincerely,

*Christi Cox*

Surface Water Program Coordinator

City of Bothell

[christi.cox@bothellwa.gov](mailto:christi.cox@bothellwa.gov)





City of Bothell™

# Natural Yard Care Workshops

Sign up for fall 2018 workshops at [www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc)

## Healthy Lawns and Gardens from the Ground Up

**Tuesday, Oct. 2**

**7 – 9 p.m.**

Healthy soil is the key to vibrant and hearty lawns and gardens. Join us to learn what makes soil work for your plants and how you can improve it to keep plants growing stress-free, reduce maintenance, and save water. We will also talk about the best lawn choices for the Pacific Northwest and how manage weeds in your lawn naturally.

*This is an indoor lecture-based workshop.*

**Bothell Operations Center  
(behind Red Robin)  
21233 20th Avenue SE  
Bothell, WA 98021**

## Smart Plant Choices for Northwest Gardens

**Tuesday, Oct. 9**

**7 – 9 p.m.**

Learn about beautiful plants that will thrive in your yard's conditions. Learn how to design and plant a garden that will weather our wet winters and dry summers while remaining vibrant, healthy, and low maintenance. We will also talk about the best planting techniques to make sure your plants get the best start possible in your garden.

*This is an indoor lecture-based workshop.*

**Bothell Operations Center  
(behind Red Robin)  
21233 20th Avenue SE  
Bothell, WA 98021**

## Hands-on Natural Yard Care Basics

**Saturday, Oct. 13**

**10 a.m. – 2 p.m.\***

Join us for a free, hands-on demonstration of basic yard care and planting techniques. Not sure how to use mulch? Worried that you aren't planting to the right depth? Want to know how an aerator works? Here's your chance to get some of the "dirt" on natural yard care. Work with the experts and get answers to your questions.

*This is an outdoor hands-on workshop. Dress for the weather and be prepared to play in the dirt!*

**Centennial Park  
(meet at picnic shelter)  
1129 208th Street SE  
Bothell, WA 98021**

*\*Planting and mulching demonstrations start at 10 a.m. and end by noon.*

*\*Aeration demonstration starts at noon and ends by 2 p.m.*

Workshops presented by





# Natural Yard Care

FREE WORKSHOPS THIS FALL!

# Free workshops this fall

Learn how to design and take care of a beautiful yard the *Natural Yard Care* way.



City of Bothell  
Public Works  
18415 101st Ave NE  
Bothell, WA 98011



Whether you're a new homeowner starting from scratch or a seasoned gardener planning a complete yard overhaul, Natural Yard Care offers something for everyone!

**1** Tuesday, Oct. 2 | 7 - 9 p.m.  
*Healthy Lawns and Gardens from the Ground Up*

**2** Tuesday, Oct. 9 | 7 - 9 p.m.  
*Smart Plant Choices for Northwest Gardens*

**3** Saturday, Oct. 13 | 10 a.m. - 2 p.m.  
*Hands-on Natural Yard Care Basics*

**Where:** **Oct. 2 & 9 workshops** Bothell Operations Center  
(behind Red Robin)  
21233 20th Ave SE, Bothell

**Oct. 13 workshop** Centennial Park  
(northern City limits)  
1129 208th St SE, Bothell

Register online at [www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc). We'll send you a reminder the day before each workshop you sign up for.

This program is brought to you by:



**Welcome to Natural Yard Care:  
Healthy Lawns and Gardens  
from the Ground Up!**

## **HOW DID YOU HEAR ABOUT THIS WORKSHOP?**

- Letter or postcard in mail
- Facebook (BothellCool)
- Facebook (Bothell Community)
- Facebook (Tilth Alliance)
- Bothell Bridge
- Bothell website
- Bothell e-news
- Sustainamania or other event
- Word of mouth
- Other \_\_\_\_\_

Thanks for attending today's workshop!  
[www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc)

**Name:**

## Welcome to Natural Yard Care: Smart Plant Choices for Northwest Gardens!

# HOW DID YOU HEAR ABOUT THIS WORKSHOP?

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- Other \_\_\_\_\_

Thanks for attending today's workshop!  
[www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc)

**Name:** \_\_\_\_\_

## Welcome to Natural Yard Care: Hands-on Natural Yard Care Basics!

# HOW DID YOU HEAR ABOUT THIS WORKSHOP?

- Letter or postcard in mail
- Facebook (BothellCool)
- Facebook (Bothell Community)
- Facebook (Tilth Alliance)
- Bothell Bridge
- Bothell website
- Bothell e-news
- Sustainamania or other event
- Word of mouth
- Other \_\_\_\_\_

Thanks for attending today's workshop!  
[www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc)

**Name:** \_\_\_\_\_

# Natural Yard Care Workshop

OCT. 2, 2018 | 7 - 9 PM

HEALTHY LAWNS AND GARDENS

FROM THE GROUND UP

Thanks for coming!



# *Natural Yard Care Workshop*

OCT. 9, 2018 | 7 - 9 PM

SMART PLANT CHOICES

FOR NORTHWEST GARDENS



---

*Thanks for coming!*

# Natural Yard Care Workshop

OCT. 13, 2018 | 10 AM - 2 PM

**HANDS-ON NATURAL**

**YARD CARE BASICS**

*Thanks for coming!*

The bottom of the poster features a blue background with illustrations of green gardening gloves on the left and a small green plant with three leaves growing out of a mound of brown soil on the right. A horizontal dotted line is positioned above the 'Thanks for coming!' text.

## Healthy Lawns and Gardens from the Ground Up

### Oct. 2, 2018 Participant Evaluation

Please read each statement below. Mark an answer on the LEFT for how much you knew about this topic **BEFORE** tonight's workshop. Next, on the RIGHT, mark how much you know **AFTER** hearing tonight's topic.

BEFORE				START HERE--- READ THIS STATEMENT FIRST	AFTER				
Did not know this	Not sure about this	Somewhat familiar	Well informed		Did not know this	Not sure about this	Somewhat familiar	Well informed	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	↓	1. Healthy soil stores carbon and filters out pollutants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		2. Getting soil tested is a first step toward assessing nutrient quality and identifying need for amendments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		3. Using a cover crop can be an effective means to improve soil structure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		4. Grass fertilizer can only be used once a year when done with grasscycling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		5. Phosphorus should not be used on lawns to prevent algae in waterways.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		6. Lawns should be watered about an inch of water a week during driest months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		7. Groundcovers like Eco-lawn (or seed mixes) could be a good alternate to lawns, reduce your mowing time, and help feed the soil.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		8. Plants may be more adaptable to slopes and shady areas than growing a lawn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		9. Lawns need 6-8 hours of sun daily for optimal growth.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		10. Improving lawn drainage can help control pests like Crane Flies or Red Thread.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What practice did you learn tonight that you will use in your yard or lawn? \_\_\_\_\_

We would like to email you a short online survey in a few months to find out how your yard care is going. Please give your name and email below. As a thank you for taking the online survey, you will be entered into a drawing for a prize.

NAME \_\_\_\_\_

E-MAIL, PLEASE PRINT \_\_\_\_\_

# Evaluation Responses

City of Bothell NYC Workshop #1, 10/2/18

Healthy Lawns and Gardens from the Ground Up

Total completed evaluations received: 24\* (34 attended class)

\*Several evaluations skipped a question

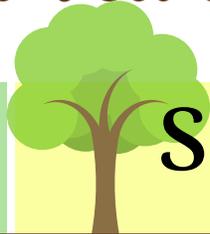
BEFORE				QUESTIONS	AFTER			
Did not know this	Not sure about this	Somewhat familiar	Well informed		Did not know this	Not sure about this	Somewhat familiar	Well informed
9	2	13		1. Healthy soil stores carbon and filters out pollutants.			6	17
5	4	13	2	2. Getting soil tested is a first step toward assessing nutrient quality and identifying need for amendments.			4	20
8	6	8	2	3. Using a cover crop can be an effective means to improve soil structure.		2	6	16
16	7	1		4. Grass fertilizer can only be used once a year when done with grasscycling.			4	20
16	4	2	2	5. Phosphorous should not be used on lawns to prevent algae in waterways.		1	2	21
10	6	6	2	6. Lawns should be watered about an inch of water a week during driest months.			4	20
14	4	5	1	7. Groundcovers like Eco-lawn (or seed mixes) could be a good alternate to lawns, reduce your mowing time, and help feed the soil.			3	21
6	5	12	1	8. Plants may be more adaptable to slopes and shady areas than growing a lawn.			4	20
8	11	4	1	9. Lawns need 6-8 hours of sun daily for optimal growth.			2	22
11	6	7		10. Improving lawn drainage can help control pests like Crane Flies or Red Thread.			2	21

# Natural Yard Care through the seasons



## Spring

March - May



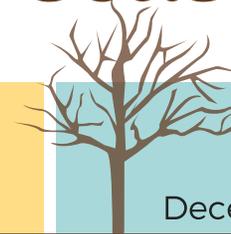
## Summer

June - August



## Fall

September - November



## Winter

December - February

### Flower and vegetable gardens

- Prepare new planting beds and gardens by mixing in 1-3 inches of compost.
- Pull weeds when they first start growing, while soil is moist and roots are short, before they go to seed.
- Buy plants that resist disease and use less water.
- Pest problems? Call the Garden Hotline, 206-633-0224, for advice.

- Mulch flower and vegetable beds with compost or grass clippings to conserve water and control weeds.
- Use fabric row covers to keep pests off sensitive vegetables.
- Identify bugs before you spray, squash, or stomp - they may be "good bugs" that eat pests.

- Pull emerging weeds in beds when ground is moist and before they develop deep roots.
- Mulch garden beds with leaves or compost to reduce winter weeds and feed the soil. Or plant winter cover crops in open beds.
- Prepare new planting areas by digging in compost.

- Rake winter leaf mulch back onto beds if winds blow it off.
- Weed beds once during winter to prevent weeds going to seed.

### Tree and shrub beds

- Prepare new tree and shrub beds by mixing compost into the entire bed (not just planting holes). Or plant trees in native soil and mulch well.

- Mulch shrub and tree beds with wood chips, leaves, or bark once a year to conserve water, reduce weeds, and feed the soil.

- Mulch tree and shrub beds with leaves, wood chips, or bark.
- Plant trees, shrubs, and many perennials in early fall to give them a good start.

- Prune fruit trees and other woody trees and shrubs while they're dormant (Dec. - Feb.).

### Lawns

- Start mowing, about 2 inches high for most lawns, or 1 inch for bentgrass lawns. "Grasscycle" - leave the clippings for free fertilizer.
- For lawns in poor condition: aerate, overseed, and top-dress with 1/2 inch of compost.
- Fertilize lawns if needed in May with "natural organic" or "slow release" fertilizer.

- Mow regularly, and leave the clippings on the lawn.
- Keep mower blades sharp to reduce lawn damage and brown tips.
- Consider saving water by letting some lawn areas (ones that don't get heavy traffic) go brown and dormant until fall.

- Improve thin areas of lawns in Sept. - Oct. by aerating, overseeding, and top-dressing with compost.
- Fertilize lawns with "natural organic" or "slow release" fertilizer in Sept. to develop healthy roots and crowd out weeds.
- Plant new lawns Sept. 1 - Oct. 15 to give them the best start before next summer.

### Winter is the time to plan for spring.

- Tune up yard equipment and sharpen mower blades.
- Plan drip irrigation or soaker hoses for beds and containers to conserve water.
- Check storage areas for unwanted chemicals, and dispose of safely. Call the Household Hazardous Waste line at 206-296-4692 for disposal information.
- Plan to replace plants that have disease or pest problems.
- Call the Garden Hotline, 206-633-0224, to ask questions and request free brochures to start planning for spring.
- More resources on back.



### Watering

- Prepare sprinkler systems by testing, adjusting, and repairing leaks.
- Lay out soaker hoses in beds, and cover with mulch.
- Check soil moisture at plant roots before watering - don't water until they need it.

- Start and re-check watering systems, and adjust for weather. Skip watering if it rains.
- Water lawns 1 inch per week, or let go brown and dormant (but water enough to moisten root zone once a month.)
- Water at dawn or in evening, not mid-day.

- Reduce watering for cooler weather in Sept.
- When rains come, shut off and drain watering systems.
- Put away exposed soaker hoses, or recover with mulch if left out.

### Composting

- Harvest compost from your bin. Throw any uncomposted sticks or stalks back in for another cycle.

- Add yard debris to compost pile; water pile to keep it moist. Place pile in shade or cover to hold moisture.

- Clear out annual garden growth and compost it for spring. Keep pile as moist as a wrung-out sponge.

# Learn more about Natural Yard Care

Questions?

## Contact the Garden Hotline



[www.gardenhotline.org](http://www.gardenhotline.org)



206-633-0224



[help@gardenhotline.org](mailto:help@gardenhotline.org)

## Resources

Soil and composting (*King County*)  
[www.kingcounty.gov/soils](http://www.kingcounty.gov/soils)

Yard and garden topics (*King County*)  
[www.kingcounty.gov/natural-yard](http://www.kingcounty.gov/natural-yard)

Choosing safer gardening products  
(*Grow Smart, Grow Safe*)  
[www.growsmartgrowsafe.org](http://www.growsmartgrowsafe.org)

Water conservation, indoors & outdoors  
(*Saving Water Partnership*)  
[www.savingwater.org](http://www.savingwater.org)

Washington State University Master Gardener info  
206-296-3440  
[www.gardening.wsu.edu](http://www.gardening.wsu.edu)

Less toxic gardening and pest control  
(*Local Hazardous Waste Management Program*)  
[www.govlink.org/hazwaste/house](http://www.govlink.org/hazwaste/house)

Choosing the right plant for the right place  
[www.greatplantpicks.org](http://www.greatplantpicks.org)

Native plant information  
[www.kingcounty.gov/gonative](http://www.kingcounty.gov/gonative)

## Brochures

Available through the Garden Hotline or on websites to the left include:

### Natural lawn & garden guides

- Growing Healthy Soil
- Choosing the Right Plants
- Smart Watering
- Natural Pest, Weed & Disease Control
- Composting at Home
- Natural Lawn Care

### Other publications

- How to Choose a Landscape Company
- How to be a Salmon-Friendly Gardener
- Four Reasons to Kick the Weed and Feed Habit
- Natural Yard Care Buyer's Guide
- Worm Bins - How to Compost



City of Bothell™

[www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc)

## Five steps to Natural Yard Care

### 1. Build healthy soil

Add compost, use mulch, and use organic fertilizers.

### 2. Plant right for your site

Know your yard (the sun, shade, wet and dry areas), choose plants wisely, and group plants with similar needs.

### 3. Practice smart watering

Water infrequently but deeply, let the rain soak in, and keep your irrigation system in top shape.

### 4. Think twice before using pesticides

Start with prevention and healthy plants, be willing to accept a little damage and a few weeds, use least-toxic products, and avoid weed and feed and other combo products with pesticides.

### 5. Practice natural lawn care

Mow higher and leave the clippings, and improve poor lawns with aeration, overseeding, and top-dressing with compost.



# Phosphorus and Home Lawns: Quick Facts and Recommendations

WASHINGTON STATE UNIVERSITY EXTENSION FACT SHEET • FS058E

## Why the issue?

Phosphorus (P) is an essential plant nutrient, but it is also a potential pollutant. Phosphorus fertilization helps maintain healthy lawns growing in P-deficient soils, but P runoff into lakes and streams can cause excessive growth of algae—harming water quality and aquatic ecosystems. (Figure 1.)



Figure 1. Pond near Centralia, Washington, choked by algal growth.

## What is changing?

The new Washington state Water Quality—Fertilizer Restrictions law takes effect on January 1, 2013. This law limits the use of lawn fertilizers that contain phosphorus to the following situations:

- When establishing grass or repairing damaged grass, using either seed or sod, during the growing season in which the grass is established
- When the soil in the area is deficient in plant-available phosphorus, as confirmed by a soil test performed no more than 36 months before the application

Violating these restrictions is a misdemeanor and subject to civil fines.

## How do I determine if my lawn needs fertilizer?

Test the soil before using phosphorus fertilizer.

- The amount of phosphorus you apply should be based on soil test results.
- Soil test samples should consist of at least 10 cores taken from across your lawn, which are then combined. If you have areas of your lawn that are very different from each other in soil type or appearance, sample and test these areas separately.
- Turfgrass soil samples should be taken at a depth of 4 inches, and should not include any existing thatch.
- If the soil pH is 7 or lower (acidic), the testing laboratory should use the “Bray P1” phosphorus test. If soil pH is higher than 7 (alkaline), the “Olsen” test should be used.
- If soil test values are above the levels listed in the chart below, it is unlikely your lawn will benefit from fertilizer P.

### Minimum adequate levels of soil P for turfgrass in WA

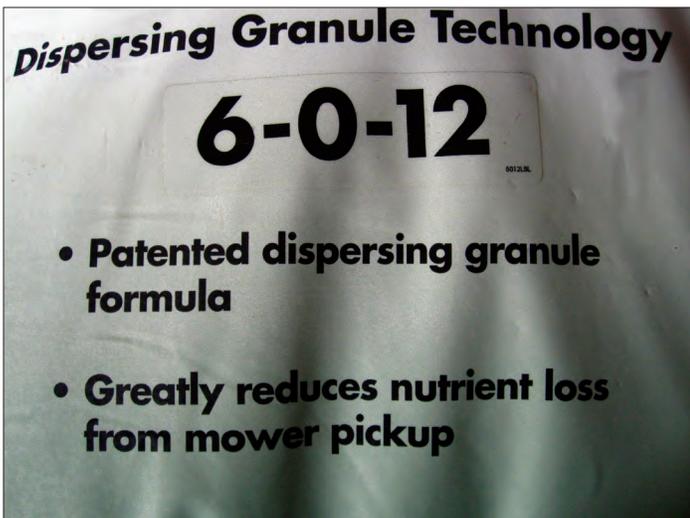
(parts per million, ppm)

Bray P1 (western WA)	Olsen P (eastern WA)
25 ppm	18 ppm

## How do I apply phosphorus fertilizer most effectively, if it is needed?

Apply phosphorus fertilizers in spring or early fall.

- The best time to apply phosphorus fertilizer is following core aeration of turf in spring or early fall. Aeration is often necessary in compacted or poorly drained soils. Phosphorus amounts ranging from 1/8 lb. to 1 lb. of  $P_2O_5$  should be applied, based on soil test results and depending on the fertilizer formulation. (Figure 2.)
- Fertilizer should not be applied immediately before mowing. Do not collect clippings for several mow-



**Figure 2.** Fertilizer labels list the amounts of nitrogen (N), phosphorus ( $P_2O_5$ ), and potassium ( $K_2O$ ), always in that order: N-P-K. The label shown here is for fertilizer that has zero phosphorus.

ings after applying fertilizer or until the pellets have dissolved.

- Light to moderate rainfall following fertilizer application can help the fertilizer sink in, but avoid fertilizing if heavy or prolonged rain is expected.
- In colder climates, the greatest runoff occurs from late fall through early spring when soil is frozen or when there is snowmelt. Avoid the application of fertilizer at these times. (Figure 3.)



**Figure 3.** Runoff from home properties can leach lawn chemicals into surface waters.

Avoid applying fertilizers to frozen soils, hard surfaces, or adjacent to open water.

- Never apply fertilizer to frozen soil or on an impervious surface, such as asphalt. If fertilizer is spilled onto an impervious surface, sweep it back onto the turf or into the fertilizer bag to reduce the risk of runoff.

- Always leave an unfertilized buffer strip, (10 ft. wide or more, depending on the slope) planted with turf, landscape plants, or native vegetation, between the fertilized area and open water, such as a pond, lake, or river.

Apply P to new lawns (which are likely to need it more than established lawns).

- If you are planting a new lawn, have your soil tested for P and other nutrients as well as pH before you prepare the soil.
- Application of phosphorus fertilizer on recently planted or developing turf helps build strong root systems.
- Since lawn sod is often fertilized with phosphorus during production, newly sodded lawns may require less P fertilizer than newly seeded turf.
- New lawns often take 2 to 3 years to become established. Many established lawns with a history of fertilization need little or no additional P. Sample the soil from established lawns every 3 to 5 years to determine if P fertilizer is needed.

### What about organic fertilizers?

Many organic fertilizers are relatively high in phosphorus and, therefore, are not appropriate if soil P is adequate. Organic P is also susceptible to runoff.

### What is the bottom line?

Phosphorus is an important plant nutrient, but it can harm fresh water sources if used incorrectly. Remember to base P applications on soil tests. Also, remove fertilizer from driveways, sidewalks, and streets (Figure 4), and leave a buffer zone around surface bodies of water.



**Figure 4.** Sweep up spilled or thrown fertilizer and grass clippings to prevent them from washing into surface waters.

## References

- Bannerman, R.T., D.W. Owens, R.B. Dodds, and N.J. Hornewer. 1993. "Source of pollutants in Wisconsin stormwater." *Water Science and Technology* 28:241-259.
- Soldat, D.J. and A.M. Petrovic. 2008. "The Fate and Transport of Phosphorus in Turfgrass Ecosystems." *Crop Science*. 48:2051-2065.
- Washington House Bill 1489, Water Quality—Fertilizer Restrictions: <http://apps.leg.wa.gov/documents/bill-docs/2011-12/Pdf/Bills/Session%20Law%202011/1489-S.SL.pdf>.



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Use pesticides with care. Apply them only to plants, animals, or sites as listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

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## Smart Plant Choices for Northwest Gardens Oct. 9, 2018 Participant Evaluation

Please read each statement below. Mark an answer on the LEFT for how much you knew about this topic **BEFORE** tonight's workshop. Next, on the RIGHT, mark how much you know **AFTER** hearing tonight's topic.

BEFORE				START HERE--- READ THIS STATEMENT FIRST  	AFTER			
Did not know this	Not sure about this	Somewhat familiar	Well informed		Did not know this	Not sure about this	Somewhat familiar	Well informed
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1. Light, wind, and access are all considerations in selecting where to place plants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2. Getting the right plant in the right place is preferable to transplanting later.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3. Organic material added to sandy soil can improve water retention while it can improve drainage in clay soil and buffer soil pH.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4. Variable sun exposure and the shade source are equal considerations in planning a garden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5. Mulching garden beds can nourish or feed the plants and help to protect the soil.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6. Local microclimates are very influential in plant growth and should be considered when making plant selections.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7. Height and width of trees and shrubs should be considered before deciding on plant placement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8. Clustering like plants together like sun lovers or shade lovers will lead to healthier plants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9. Making a map of the garden to consider sun, weather, soil, microclimates is essential to a successful garden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10. Using the tuna can test is a good way to measure your hose watering volume in order to use water efficiently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What practice did you learn tonight that you will use in your garden? \_\_\_\_\_

We would like to email you a short online survey in a few months to find out how your yard care is going. Please give your name and email below. As a thank you for taking the online survey, you will be entered into a drawing for a prize.

NAME \_\_\_\_\_

E-MAIL, PLEASE PRINT \_\_\_\_\_

# Evaluation Responses

City of Bothell NYC Workshop #2, 10/9/18

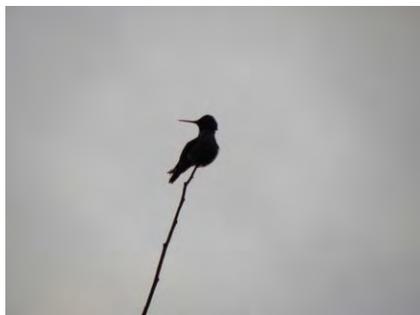
Smart Plant Choices for Northwest Gardens

Total completed evaluations received: 26\* (37 attended class)

\*Several evaluations had blanks in some spots

BEFORE				QUESTIONS	AFTER			
Did not know this	Not sure about this	Somewhat familiar	Well informed		Did not know this	Not sure about this	Somewhat familiar	Well informed
1		22	3	1. Light, wind, and access are all considerations in selecting where to place plants.			2	24
1	7	10	8	2. Getting the right plant in the right place is preferable to transplanting later.		1	6	19
6	5	11	4	3. Organic material added to sandy soil can improve water retention while it can improve drainage in clay soil and buffer soil pH.		1	4	20
	7	15	3	4. Variable sun exposure and the shade source are equal considerations in planning a garden.			4	21
1	2	16	7	5. Mulching garden beds can nourish or feed the plants and help to protect the soil.			4	21
3	10	12	1	6. Local microclimates are very influential in plant growth and should be considered when making plant selections.			5	20
	1	15	10	7. Height and width of trees and shrubs should be considered before deciding on plant placement.			4	21
5	7	11	3	8. Clustering like plants together like sun lovers or shade lovers will lead to healthier plants.			4	21
6	11	7	2	9. Making a map of the garden to consider sun, weather, soil, and microclimates is essential to a successful garden.			6	19
15	3	3	5	10. Using the tuna can test is a good way to measure your hose watering volume in order to use water efficiently.	1	1	3	20

# Bird Friendly Plantings



## Key Points for Creating Bird Friendly Gardens

The most successful bird friendly garden is one that is created with the needs of birds in mind. This means you need to create habitat – a garden that will provide shelter, nesting space, food and water for the birds that live in your area. Include plants that bear fruit or develop nuts and dry seed heads for food. Because native birds recognize native flora it is critical to include a good proportion of native plants in your garden cornucopia - especially for the structure and shelter many of them also provide. Build layers - from tall trees to low groundcovers to attract a variety of birds. Cover the ground with loose wood chips and leaf litter to create spaces for ground feeding birds to join the fun. Provide snags, if safety permits, to encourage cavity nesting birds or place appropriate bird boxes in the garden – ones that can be cleaned each season. Add water features like bird baths that are shallow, have textured surfaces and can also be easily cleaned. And don't be too tidy! Leave some seed heads on fading summer flowers, like sunflowers, *Echinacea*, and *Cosmos*, to attract seed eating birds in for a meal. A diverse and well planted garden will attract a diverse and well fed symphony of birds to your garden all year long!

## Websites

**Living With Wildlife** - Washington State Department of Fish and Wildlife [wdfw.wa.gov/living/](http://wdfw.wa.gov/living/)  
**Native Plant Guide** - King County [green.kingcounty.gov/GoNative/Index.aspx](http://green.kingcounty.gov/GoNative/Index.aspx)  
**Washington Native Plant Society** [www.wnps.org](http://www.wnps.org)  
**Seattle Audubon Society** [www.seattleaudubon.org](http://www.seattleaudubon.org)  
**National Wildlife Federation** [www.nwf.org](http://www.nwf.org)  
**American Bird Conservancy** – “Cats Indoors” program [www.abcbirds.org/cats](http://www.abcbirds.org/cats)  
**Backyard Wildlife Sanctuary Program** - [www.wdfw.wa.gov/living/backyard](http://www.wdfw.wa.gov/living/backyard)  
**Landscape for Life** – [www.landscapeforlife.org](http://www.landscapeforlife.org)

## Books

**'Landscaping for Wildlife in the Pacific Northwest'**; Russell Link, U.W. Press  
**'Plants of the Pacific Northwest Coast'**; Pojar and McKinnon, Lone Pine Publishing  
**'Gardening With Native Plants of the Pacific Northwest'**; Art Kruckeberg, U.W. Press  
**'Birds of Seattle'**; Chris C. Fisher, Lone Pine Publishing  
**'Birds of the Pacific Northwest'**; John Shewey and Tim Blount, Timber Press  
**'National Audubon Society – Field Guide to Birds Western Region'**; Miklos D.F. Udvardy and John Farrand, National Audubon Society

# Bird Friendly Plantings



**Western Red Cedar** – *Thuja plicata* A standard conifer of moist northwest forests. Growing to more than 100 feet tall in the landscape the cedar provides year round shelter and nesting sites for many species of birds. Seeds are eaten by Pine Siskins.



**Evergreen Huckleberry** – *Vaccinium ovatum* A broadleaf evergreen shrub that grows to 6 feet tall with fresh foliage and stems tinged red in the spring. Growing to six feet, tolerating shade or sun, this beauty provides delicious fruit for both you and the birds in your garden.



**Oregon Grape** – *Mahonia aquifolium* Shiny and spiny, Oregon Grape does double duty sharing nectar rich bright yellow flowers in the spring for the overwintering Anna's Hummingbirds and succulent blue fruit in the summer for other birds. Good for shelter too. Try making wine from the fruit for a fun northwest treat.



**Rose** – *Rosa sp.* The wild native roses of the Pacific Northwest not only provide lovely flowers but burst out with juicy and nutritious fruit in the fall, a favorite of birds. Dry some for tea and leave the rest for the birds. Their thicket like growth is a boon for birds seeking safety from predators.



**Maple** – *Acer sp.* Maples are classic landscape trees, gracing our streets as well as our gardens. For wild birds they provide ample space to build nests and tasty seed heads in their samaras in the fall. The gorgeous range of fall color is a benefit too, brightening up even the gloomiest of October days in the northwest.



**Red Stemmed Dogwood** – *Cornus alba, C. sanguinea, C. sericea* A variety of species comprise the red (and orange and yellow) stemmed dogwood shrubs, best known for their colorful new growth that glows on winter days. These shrubby deciduous plants bloom in the summer and bear fruit that birds make good use of. The dense growth is good shelter too.



**Lichen and Moss** – *Various sp.* Lichens and moss come with the territory when you garden in the northwest. Instead of fighting the inevitable learn to embrace their beauty in your garden. Used by many birds to make nests in the spring, lichen, moss and spider-silk can comprise the delicate 1 by 1.5 inch nest of the Anna's Hummingbird nestled into your cedar tree. Some of them make excellent dyes as well



**Annual and Perennial Flowers** – *Various sp.* The fading of your colorful summer flower display need not make you sad – leave the seed heads to develop as the plants finish their bloom and watch birds flock in to eat them. Favorites of sparrows, finches, towhees and even quail, the autumn pickings from Echinacea, Rudbeckia, Sunflowers, Cosmos, Yarrow, Zinnias, Amaranth and more will make up the most glorious fall feast for your feathered friends.

# Planting to Attract Beneficial Insects

## Key Points for Protection of Pollinators and Beneficial Insects

Think of your garden as habitat! Reduce or eliminate pesticide use; even “safe” products can be harmful to beneficial insects. Incorporate blooming plants into your landscape and vegetable garden for year round bloom. Use native plants; they are recognizable to native insects. Use plants from the Asteraceae (Daisy), Lamiaceae (Mint) and Apiaceae (Carrot) families.



## Websites

Bumblebee Conservation [bumblebeeconservation.org/gardening\\_for\\_bumblebees.htm](http://bumblebeeconservation.org/gardening_for_bumblebees.htm)

Farmer Fred [farmerfredrant.blogspot.com/2010/07/plants-that-attract-beneficial-insects.html](http://farmerfredrant.blogspot.com/2010/07/plants-that-attract-beneficial-insects.html)

Pollinator Partnership [pollinator.org/](http://pollinator.org/)

Pollinator Pathway [pollinatorpathway.com/](http://pollinatorpathway.com/)

Xerces Society [xerces.org/](http://xerces.org/)

## Books

### ***Attracting Native Pollinators: Protecting North America's Bees and Butterflies***

The Xerces Society Paperback, \$25 members, \$30 nonmembers

### ***Managing Alternative Pollinators: A Handbook for Beekeepers, Growers, and Conservationists***

Eric Mader, Marla Spivak, and Elaine Evans

### ***The Butterflies of Cascadia***

Robert Michael Pyle

### ***Befriending Bumble Bees***

Elaine Evans, Ian Burns and Marla Spivak

### ***Insects of the Pacific Northwest***

Peter Haggard, Judy Haggard

## Citizen Science

Great Sunflower Project [greatsunflower.org](http://greatsunflower.org)

Bumble Bee Watch [bumblebeewatch.org](http://bumblebeewatch.org)

Urban Pollination Project [nwpollination.org](http://nwpollination.org)

Pollinator Pathway [pollinatorpathway.com](http://pollinatorpathway.com)

Dragonfly Pond Watch [xerces.org/dragonfly-migration/pondwatch](http://xerces.org/dragonfly-migration/pondwatch)

# Planting to Attract Beneficial Insects



## Lady Beetle

**Carrot Family:** Angelica, Cilantro and Fennel

**Daisy Family:** Cosmos, Dandelion, Echinacea and Marigold

**Mint Family:** Ajuga, Mint, Lavender, Oregano, Thyme

**Other:** Nasturtium, Penstemon and Statice



## Green Lacewing

**Carrot Family:** Angelica, Cilantro and Fennel

**Daisy Family:** Coreopsis, Cosmos, Rudbeckia, Yarrow

**Pea Family:** Clover and Alfalfa



## Anise Swallowtail Butterfly

**Carrot Family:** Fennel, Parsley and Queen Anne's Lace

**Daisy Family:** Echinacea, Rudbeckia, Zinnia

**Other:** Rue



**Parasitoid Wasp** Carrot Family: Dill, Fennel, and Lovage

**Daisy Family:** Cosmos, Marigold, Yarrow, and Zinnia

**Mint Family:** Lemon Balm, Mint, Thyme

**Other:** Alyssum, Lobelia, Potentilla



**Hoverfly** Carrot Family: Dill, Cilantro, Fennel, and Queen Anne's Lace

**Daisy Family:** Aster, Chrysanthemum, Rudbeckia, Marigold, Yarrow and Zinnia

**Mint Family:** Ajuga, Lavender, Lemon Balm, Mint, Monarda, Thyme

**Other:** Allium, Amaranth, Buckwheat, Goldenrod, Lobelia, Penstemon, Sedum



## Native Bumble Bee

**Daisy Family:** Bachelor's Button, Calendula, Dahlia, Echinacea, Goldenrod, Sunflower

**Mint Family:** Catnip, Lavender, Monarda, Mint, Oregano, Thyme

**Borage Family:** Borage, Comfrey, Forget-Me-Not, Heliotrope Phacelia

**Other:** Penstemon, Rose, Salvia



## Honey Bee

**Daisy Family:** Aster, Calendula, Cornflower, Echinops, Marigold and Sunflower

**Mint Family:** Lavender, Monarda, Oregano, Rosemary and Thyme

**Other:** Clematis, Crocus, Hebe, Poppy, Sedum, Snapdragon



## Leaf Cutter Bee

**Daisy Family:** Goldenrod and Sunflower

**Mint Family:** Lavender

**Other:** Legumes, Penstemon, Phacelia



**Soldier Beetle** Carrot Family: Eryngium and Queen Anne's Lace

**Daisy Family:** Echinops, Echinacea, Goldenrod, Helianthus, Marigold, Zinnia

**Mint Family:** Winter Savory



## Woodland Skipper Butterfly

**Daisy Family:** Aster, Dandelion, Marigold, Rudbeckia and Zinnia

**Mint Family:** Lavender, Oregano and Sage

**Other:** Grasses for larvae

# SOIL RESOURCES FOR EDIBLE GARDENING



If you want to grow healthy plants, you need to build healthy soil. Healthy soil is full of nutrients, microorganisms and organic matter. It has good drainage and water holding capacity and helps keep the water and air free of pollutants. Improve the quality of your soil by adding compost and mulch. Before you add fertilizer, test your soil to find out what your garden needs and make sure the soil is free of contaminants. You can build healthy soil by planting cover crops, using a “no-till” technique such as sheet mulching or straw bale gardening, and rotating your crops to prevent attacks from pests and disease.

## Soil Testing

### **King Conservation District Soil Testing Program**

Tests for fertility, pH, and organic matter. Does not include testing for heavy metals. Free testing for landowners who reside within the eligibility area, one time only, five samples. Additional soil tests can be added for a fee.  
[www.kingcd.org](http://www.kingcd.org), [soiltesting@kingcd.org](mailto:soiltesting@kingcd.org), (425) 282-1905

### **UMass Extension Soil & Plant Tissue Testing Laboratory, Amherst, MA**

Tests for fertility, pH, cation exchange, lead and aluminum. Extra charges for organic matter and soluble salts.  
[soiltest.umass.edu](http://soiltest.umass.edu), [soiltest@umass.edu](mailto:soiltest@umass.edu), (413) 545-2311

### **Cascade Analytical, Inc**

Tests for fertility, organic matter, pH, and soluble salts. Extra charges for lead and arsenic.  
[www.cascadeanalytical.com/analytical-services/agricultural/soil-fertility](http://www.cascadeanalytical.com/analytical-services/agricultural/soil-fertility), (800) 545-4206

### **Soiltest Farm Consultants, Inc.**

Offers a variety of tests for fertility, heavy metals and other elements.  
[www.soiltestlab.com](http://www.soiltestlab.com), (800) 765-1622

### **Kuo Testing Labs, Inc.**

Offers a variety of tests for fertility, heavy metals and other elements.  
[www.kuotestinglabs.com](http://www.kuotestinglabs.com), (800) 328-0112

### **Edge Analytical Laboratories**

Tests for heavy metals, bacteria, pesticides and other contaminants.  
[www.edgeanalytical.com](http://www.edgeanalytical.com), (800) 755-9295

## Sheet Mulching and Straw Bale Gardening

<https://green2.kingcounty.gov/gonative/Article.aspx?Act=view&ArticleID=36>  
[www.agroforestry.net/free-publications/sheet-mulching](http://www.agroforestry.net/free-publications/sheet-mulching)  
[www.no-dig-vegetablegarden.com/straw-bale-gardening.html](http://www.no-dig-vegetablegarden.com/straw-bale-gardening.html)

### **Find local sources of arborist chips, organic straw bales, cardboard or burlap bags:**

The Garden Hotline, [gardenhotline.org](http://gardenhotline.org), (206) 633-0224, [help@gardenhotline.org](mailto:help@gardenhotline.org)

## Cover Crops

### Mail Order:

Fedco Seed Company, [www.fedcoseeds.com/ogs.htm](http://www.fedcoseeds.com/ogs.htm), (207) 426-9900  
Johnny's Selected Seeds, [www.johnnyseeds.com](http://www.johnnyseeds.com), (877) 564-6697  
Osborn Seed Company, [www.osborneseed.com](http://www.osborneseed.com), (800) 845-9113  
Peaceful Valley Farm Supply, [www.groworganic.com](http://www.groworganic.com), (888) 784-1722  
Territorial Seed Company, [www.territorialseed.com](http://www.territorialseed.com), (800) 626-0866

### Local Retail – King County:

Bellevue Nursery, <http://bellevuenursery.com/>, (425) 454-5531  
Furney's Nursery, [www.furneysnursery.com](http://www.furneysnursery.com), (206) 878-8761  
Hayes Feed and Country Store (206) 242-8000  
McLendon's Hardware, [www.mclendons.com](http://www.mclendons.com), Renton (425) 235-3555 Woodinville (425) 485-1363  
Molbak's Nursery, [www.molbaks.com](http://www.molbaks.com), (425) 483-5000  
The Grange in Issaquah, <http://grangesupply.com/>, (425) 392-6469

### Local Retail: Seattle:

City People's Garden Store, [www.citypeoples.com/gardenstore](http://www.citypeoples.com/gardenstore), (206) 324-0737  
Magnolia Garden Center, [www.magnoliagarden.com/](http://www.magnoliagarden.com/), (206) 284-1161  
Sky Nursery, [www.skynursery.com](http://www.skynursery.com), (206) 546-4851  
Swansons Nursery, [www.swansonsnursery.com](http://www.swansonsnursery.com), (206) 782-2543  
Walt's Organic Fertilizer Co., <https://waltsorganic.com>, (206) 297-9092  
West Seattle Nursery, <http://westseattlenursery.com/>, (206) 935-9276

## Certified Organic Soil Products

### Bulk

Bailey Compost, [www.baileycompost.com](http://www.baileycompost.com), (360) 568-8826  
Cedar Grove Composting, <https://cedar-grove.com>, (877) 764-5748  
DirtExchange, <http://dirtexchange.us>, (206) 599-3478 (carries Cedar Grove products)  
Sky Nursery, [www.skynursery.com](http://www.skynursery.com), (206) 546-4851 (carries Cedar Grove products)  
Yelm Earthworm & Castings Farm, [www.yelmworms.com](http://www.yelmworms.com), (877) 339-6767

### Bagged

Black Gold OMRI certified products – available at local retail stores including Fred Meyer  
Cedar Grove Compost & Potting Soil - available at local retail stores  
Zoo Doo compost. Call the ZooStore at (206) 548-1535 to check for availability.

## Organic Fertilizer Sources

Walt's Organic Fertilizer Co., <https://waltsorganic.com>, (206) 297-9092. Granular certified organic 'Rainy Pacific NW Blend' fertilizer and others blended for local conditions.  
Hendrickus Organics, <http://www.hendrikusorganics.com>, (425) 392-9977. Granular certified organic fertilizers and soil conditioners blended for local conditions.  
Dr. Earth, <https://drearth.com>. Granular and liquid fertilizers  
E.B. Stone, [www.ebstone.org](http://www.ebstone.org). Granular and liquid fertilizers  
Neptune's Harvest, [www.neptunesharvest.com](http://www.neptunesharvest.com), Granular and liquid fertilizers  
WISOrganic, <http://wisorganic.com>. All-purpose organic liquid fertilizers made from food scraps collected at PCC Natural Markets and made into fertilizer in Issaquah.  
Wiser Worm Farm, [www.wiserwormfarm.com](http://www.wiserwormfarm.com). Worm tea fertilizer made from certified organic worm castings.

## Crop Rotation for Integrated Pest Management and Fertility

"The Maritime Northwest Garden Guide", Seattle Tilth, rev. ed., 2014.  
"Your Farm in the City", Lisa Taylor, 2011, Black Dog and Leventhal Publishers, Inc.  
"Growing Vegetables West of the Cascades", Steve Solomon, 2007, Sasquatch Books.

# Taste the Flowers!



## Key Points for Growing Healthy Edible Flowers

Build healthy soil by adding compost, plant your plants in the right place for their needs and don't use toxic chemicals to manage pests or fertilize your plants. Tend to their needs, making sure they get adequate water during the summer. Keep the flowers picked (and eaten!) to keep them blooming. Remove stamen and style to reduce pollen allergy issues before eating. Many edible flowers also attract pollinators and other beneficial insects - plant enough for everyone! Be certain of your plant's identification before eating flowers you are not familiar with. Do not pick wild edible flowers from sites that might have been sprayed with pesticides.

## Websites

Oregon State IPM [www.oregonstate.edu/dept/nurspest/](http://www.oregonstate.edu/dept/nurspest/)  
Sustainable Flower Farming [www.modernfarmer.com/2015/02/sustainable-flower-farming/](http://www.modernfarmer.com/2015/02/sustainable-flower-farming/)  
West Coast Seeds [www.westcoastseeds.com/articles-and-instructions/flower-talk/list-of-edible-flowers/](http://www.westcoastseeds.com/articles-and-instructions/flower-talk/list-of-edible-flowers/)  
National Gardening Association [www.garden.org/ediblelandscaping/?page=edible-flowers](http://www.garden.org/ediblelandscaping/?page=edible-flowers)  
North Carolina Cooperative Extension [www.content.ces.ncsu.edu/choosing-and-using-edible-flowers-ag-790](http://www.content.ces.ncsu.edu/choosing-and-using-edible-flowers-ag-790)

## Books

*Maritime Northwest Garden Guide* – Tilth Alliance

*The Edible Flower Garden* - Rosalind Creasy

*Edible Flowers and Leaves* – D & P Gramp

*Edible Flowers* – Kathy Brown

*The Organic Gardener's Handbook* - Fern Marshall Bradley and Barbara W. Ellis

# Taste the Flowers!



**Alyssum** – *Lobularia maritima* This Brassica family member makes a nice addition to garnishes mixed with parsley. Try adding to jelled desserts. Attractive to pollinators



**Carnation** – *Dianthus caryophyllus* Steep these spicy sweet flowers in wine and add as toppings on cupcakes. Add fresh and whole to salads or pull petals off to add as garnish on deviled eggs.



**Dahlia** – *Dahlia pinnata* Succulent colorful petals can be added to salad – tastes just like lettuce! The tubers are edible too though some are more bland than others. Peel and cook like potatoes



**Daylily** – *Hemerocallis fulva* The flowers and the tubers are both edible. The flowers are sweet and tender and great last minute additions to a summer salad. The tubers can be boiled like potatoes. Daylilies are a good source of Vitamin C and carotene



**Marigold** – *Tagetes patula* This spicy and colorful flower can be brewed into a warming tea or used as a bright accent to salads. Great for attracting beneficial insects.



**Nasturtium** – *Tropaeolum majus* Spicy flowers are great as flavorful fritters or stuffed with savory meat and olives. Add them whole to salads or garnish fruity desserts.



**Pot Marigold** – *Calendula officinalis* Add plucked petals to quiche or scrambled eggs or try in a fresh garden salsa. You can also dry and use the petals later as garnish – used medicinally the petals are also added to skin nourishing salves.



**Sunflower** – *Helianthus annuus* This incredible versatile plant offers petals, seeds, leaves and young shoots for your culinary use. Stir fry the young shoots and mature leaves – roast and salt the seeds and toss some petals into your salad.



**Zinnia** – *Zinnia x hybrida* Another great flower for tea, Zinnias also make a great addition to lemonade. Try adding them to cheese spreads for a little kick and color. Deep fry or stir fry and eat with rice.

## Planting and Mulching Demonstration October 13, 2018 Participant Evaluation

***Please mark X or ✓ your answer to each question and add any comments you wish. Thank you for your time.***

		Not at all	Fairly well	Extremely well	Not able to answer
<b>1</b>	To what extent are you ready to apply best planting practices such as plant width, depth, watering, root care, and soil conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2</b>	How well did you learn the techniques for mulching plant beds to nourish and feed plants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3</b>	To what extent can you apply the practical guides you got on plant placement such as considering height, spread, trees, and sun?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4</b>	How prepared are you to try something new from today's demonstration on planting and mulching?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If this is your first time attending a Natural Yard Care Program event, please add your name and email so we may send you ONE brief online follow-up survey in 1-2 months to ask if you are using these practices. Thanks.

NAME \_\_\_\_\_ EMAIL (please print) \_\_\_\_\_

## Aeration Demonstration October 13, 2018 Participant Evaluation

***Please mark X or ✓ your answer to each question and add any comments you wish. Thank you for your time.***

		Not at all	Fairly well	Extremely well	Not able to answer
<b>1</b>	To what extent are you ready to use what you learned about variations of aeration (spike or plug) and use a manual or mechanical aerator?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2</b>	How well did you learn techniques for top dressing such as top soil, compost, or grass options?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3</b>	To what extent could you apply practical tips for improving lawn drainage, water runoff, or excess moisture?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4</b>	How prepared are you to try something new from today's aeration demonstration?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If this is your first time attending a Natural Yard Care Program event, please add your name and email so we may send you ONE brief online follow-up survey in 1-2 months to ask if you are using these practices. Thanks.

NAME \_\_\_\_\_ EMAIL (please print) \_\_\_\_\_

# Evaluation Responses

City of Bothell NYC Workshop #3, 10/13/18

Hands-on Demonstration, Part 1: Planting and Mulching

Total completed evaluations received: 9 (9 attended class)

QUESTIONS	AFTER DEMO			
	Not at all	Fairly well	Extremely well	Not able to answer
1. To what extent are you ready to apply best planting practices such as plant width, depth, watering, root care, and soil conditions?		1	8	
2. How well did you learn the techniques for mulching plant beds to nourish and feed plants?		1	8	
3. To what extent can you apply the practical guides you got on plant placement such as considering height, spread, trees, and sun?		2	7	
4. How prepared are you to try something new from today's demonstration on planting and mulching?			9	

# Evaluation Responses

City of Bothell NYC Workshop #3, 10/13/18

Hands-on Demonstration, Part 2: Aeration

Total completed evaluations received: 8 (8 attended class)

QUESTIONS	AFTER DEMO			
	Not at all	Fairly well	Extremely well	Not able to answer
1. To what extent are you ready to use what you learned about variations or aeration (spike or plug) and use a manual or mechanical aerator?			8	
2. How well did you learn the techniques for top dressing such as top soil, compost, or grass options?			8	
3. To what extent could you apply practical tips for improving lawn drainage, water runoff, or excess moisture?	1	2	5	
4. How prepared are you to try something new from today's aeration demonstration?		1	7	

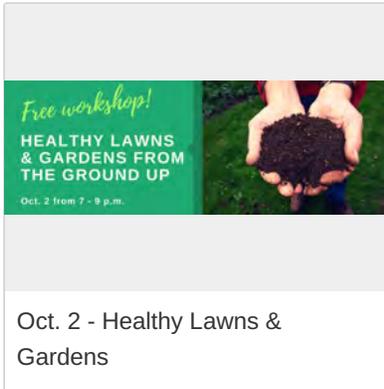
# Natural Yard Care Workshops Follow-Up Questionnaire

**Which workshop(s) did you attend?**

Thank you for attending at least one of our Natural Yard Care workshops in October. We would like to know if you have used what you learned in natural yard or lawn care. We would also like to ask what additional information would help increase the level of natural yard care you techniques you use. Please mark your answers for each question.

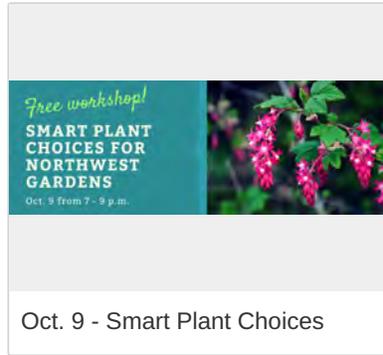
At the end of the survey, you can enter a drawing for a copy of Eileen Stark's book called **Real Gardens Grow Natives: Design, Plant, & Enjoy a Healthy Northwest Garden**. Thank you!

1 Which workshop(s) did you attend? (Check all that apply.)



Free workshop!  
HEALTHY LAWNS & GARDENS FROM THE GROUND UP  
Oct. 2 from 7 - 9 p.m.

Oct. 2 - Healthy Lawns & Gardens



Free workshop!  
SMART PLANT CHOICES FOR NORTHWEST GARDENS  
Oct. 9 from 7 - 9 p.m.

Oct. 9 - Smart Plant Choices



Free workshop!  
HANDS-ON NATURAL YARD CARE BASICS  
Oct. 13 from 10 a.m. - 2 p.m.

Oct. 13 - Hands-on NYC Basics

2 What is your email address? *We will not share your email address with others or use it for commercial purposes.*



## Natural Yard Care Workshops Follow-Up Questionnaire

Have you used any of the techniques you learned in the workshop(s)?

3 In what ways have you improved the soil in your yard or garden? (Check all that apply)

- Added organic matter (compost)
- Used a cover crop as a nitrogen and nutrient source
- Had soil tested to identify if nutrients are needed
- I have not done anything to the soil in my yard or garden
- Other (please specify)

4 What have you used to renovate or maintain your lawn? (Check all the apply.)

- Natural or organic fertilizer (slow release)
- Aeration - manual or mechanical
- Top dressing with compost
- I have not done anything to renovate or maintain my lawn
- Top dressing with grass
- Other (please specify)

5 If you have had lawn problems, what actions have you taken to improve your lawn's health? (Check all the apply.)

- Assessed what the issue is, such as slope, ponding, and shade
- Used a new seed mix in place of other lawn seeds to replace lawn or in place of lawn
- Considered using a seed mix such as Eco-lawn, but have not decided
- I have not taken any of these actions
- Other (please specify)

6 Have you applied best planting practices in placing new plants in your garden? (Check all the apply.)

- I have not done any planting yet
- I have planned for new plants but haven't yet planted anything
- I have been more selective in plant placement
- I have placed new plants considering width, depth, sun, shade, soil, and microclimate
- Other (please specify)



7 Have you mapped your garden to renovate with new plants? (Check all the apply.)

- No, I have not done this
- I plan to do this in the future
- I am not likely to do this
- Yes, I have mapped my garden
- I am not sure whether I need to do this
- Other (please specify)

8 What actions have you taken to improve watering and decrease water use? (Check all that apply.)

- Placed alike plants together to increase watering efficiency
- Aerated the lawn
- Chosen plants with low watering needs
- Improved lawn drainage
- Mulched garden beds
- Measured water volume using the tuna can test
- Watered in the morning to avoid evaporation
- I have not done any of these
- Other (please specify)

9 If you **haven't** taken any action in your yard or garden since the workshop(s) you attended, could you please tell us why? (Check all that apply.)

- I have not had time
- I don't know
- I am not sure what to do
- This question doesn't apply to me
- I am planning to wait until spring or next fall
- Other (please specify)



## Natural Yard Care Workshops Follow-Up Questionnaire

**What else would you like to learn about?**

10 What Natural Yard Care topics would you like to learn more about?

11 What did you enjoy about the workshop(s) you attended?

12 How could we make the next series of Natural Yard Care workshops better for you?



## Natural Yard Care Workshops Follow-Up Questionnaire

Want to win a free northwest gardening book?

As our thanks to you for taking this survey, we're offering a chance to win a copy of Eileen Stark's book called **Real Gardens Grow Natives: Design, Plant, & Enjoy a Healthy Northwest Garden**. We will randomly select one winner from all of the survey participants the week of January 7 and notify you by email if you've won.



- 13 If you'd like to be entered into the drawing, please type your email address one more time.



## Natural Yard Care Workshops Follow-Up Questionnaire

**Thank you for your time!**

- 14 **Thanks again for attending at least one of our Natural Yard Care workshops!** We're hoping to hold more workshops next fall on different topics. Would you like us to notify you about future workshops?

Yes

No

Learn more about Natural Yard Care at [www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc).

## Natural Yard Care Questionnaire

Do you qualify to take this survey?

In October, City of Bothell offered a series of Natural Yard Care workshops and a demonstration for residents, including new homeowners. To assess the effectiveness of the workshops and to identify the community need for more workshops, we invite you to answer the following questions. Your responses are confidential. To thank you for your time, you can enter a drawing for a book called **Northwest Home Landscaping**, which includes 48 landscape designs and over 200 plants suited for our region. We will ask you for your name and email at the end of the survey if you'd like to enter the drawing. Thanks for your time!



\* 1. Did you attend any of the three Natural Yard Care workshops we offered in October?

- No
- Yes

## Natural Yard Care Questionnaire

Do you live in Bothell?

\* 2. Do you live within Bothell's city limits?

- Yes
- No
- I don't know

**\* 3. What is your zip code?**

## Natural Yard Care Questionnaire

### What do you already know about Natural Yard Care?

**\* 4. Please select one answer that best describes your gardening/yard care in the past four months.**

	I don't know this and/or I don't plan to do this	I would consider doing this in the future	I want to know more about this before deciding whether to do it	I know this or I do this already	I'm unable to answer this
Testing soil can determine any need for amendments (e.g. lime, organic material)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using a cover crop is a means to improve soil structure in my yard/garden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A natural or organic fertilizer can be used annually along with grasscycling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If phosphorous is used on lawns, it leads to algae in waterways	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A groundcover such as Eco-lawn or a seed mix can be used in place of a traditional lawn in all or part of the space available for a lawn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Methods such as top dressing, applying compost, or grasscycling can maintain the condition of a lawn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I don't know this  
and/or I don't plan  
to do this

I would consider  
doing this in the  
future

I want to know  
more about this  
before deciding  
whether to do it

I know this or I do  
this already

I'm unable to  
answer this

Using a manual or  
mechanical aerator  
can improve the  
condition of a lawn  
with the plugs left on  
top of the lawn and  
watered

Amending the soil in a  
garden with organic  
matter can improve  
water retention or  
improve drainage,  
depending on the type  
of soil

Mulch on plant beds  
typically nourishes or  
feeds the plants

Best planting practices  
consider all conditions  
for plant placement  
(plant width, depth,  
water need, soil  
conditions,  
microclimates)

Mapping a yard is very  
useful to decide where  
to place plants,  
shrubs, trees, lawn  
and/or groundcover

Testing the water  
volume for the hose or  
watering technique  
used will lead to  
watering efficiently  
and effectively based  
on conditions

**\* 5. Please continue with these final questions.**

	Not interested at all	Would depend on the topic	Would depend on the day and time	Uncertain
How likely are you to attend a natural yard care class that is 2 hours long on a weeknight or weekend?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely are you to attend a "get your hands dirty" demonstration on a garden or natural yard care topic?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**6. What garden or yard care topic(s) would you most like to learn about?**

**7. How long have you lived in your current home?**

- Less than 6 months
- 6-12 months
- 1-2 years
- 3-5 years
- More than 5 years

**8. Would you like to be entered into a drawing to win a copy of a book called Northwest Home Landscaping, which includes 48 landscape designs and over 200 plants suited for our region?**

- Yes
- No

## Natural Yard Care Questionnaire

Contact information for drawing

**9. Please enter your email address below so we can reach you if you win the drawing. We will not share your email address with others.**

We will keep your email address until one week after the drawing is completed on Dec. 31, 2018.

## Natural Yard Care Questionnaire

Thanks for your time!

Thank you! Your answers help us determine how to tailor our Natural Yard Care program to fit your needs. Learn more about Natural Yard Care at [www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc). **We appreciate your time!**

*If you entered the drawing, we will randomly select a winner the first week of January.*



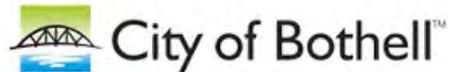
# Natural Yard Care Program Evaluation

Amended Report as of January 4, 2019



Prepared for:

Christi Cox  
Surface Water Program Coordinator – Education & Outreach  
City of Bothell Public Works



And  
Tilth Alliance



Prepared by:

Maggie McKenna, PhD, MPH  
ConTEXT Evaluation

## Table of Contents

Introduction	1
Methods for Data Collection and Analysis	2
Results: Participants increased Knowledge of Lawn Care Practices	3
Additional class results: Participants also Gained Knowledge about Plant Choices	4
Results from October Demonstrations/ Workshops on Planting and Mulching and Aeration	6
Discussion: Participants have adopted Natural Yard Care Practices	7
Comparison of Class Participants to other Local Residents	8
Conclusions	11
Suggestions to Improve Classes and Future Class Topics	12
Appendix A - List of Class Topics	13
Appendix B - Natural Yard Care Questionnaire	14

# Natural Yard Care Program Evaluation

## Introduction

The City of Bothell began a natural yard care outreach and education program nearly ten years ago in the interest of addressing water quality issues that are related to local residents' use of chemicals and pesticides as part of lawn and garden care. The City of Bothell previously participated in 2014-15 in an evaluation of natural yard care education in conjunction with selected North and South Sound communities to document the effectiveness of outreach education models that varied in key elements.<sup>1</sup>

In Fall 2018 the City of Bothell contracted with Tilth Alliance to deliver instruction on natural yard practices to reach local residents and to also evaluate the classes and workshops. The Garden Hotline Educators at Tilth Alliance have experience in conducting natural lawn and yard care education that engages local residents, is delivered with reasonable costs, and has been shown to contribute to residents adopting or maintaining natural yard care practices that will protect the environment and conserve natural resources.

The environmental education included a two-hour class on Natural Lawn Care, a two-hour class on Choosing the Right Plant, a two hour demonstration/workshop on Aeration Methods and a two hour demonstration/workshop on Planting and Mulching. The classes were delivered by professionals with expertise in botany, landscaping, and the influence of northwest maritime climate on gardening. The participants had access to ask the instructors questions and there were incentives offered in door prizes and an opportunity to have a consultation from an expert garden educator. The classes were each delivered on a weeknight in early October and the two workshops followed on Saturday October 13<sup>th</sup>.

There were 24 class attendees who completed the first class evaluation and 26 completed the second class evaluation. There were fewer participants at the Saturday workshops with nine attendees at the Mulching workshop and eight attendees completing the evaluation at the Aeration workshop.

The residents could have learned about the educational offerings through several means that included a City of Bothell brochure listing recreational options and activities, an announcement, or word of mouth promotion through friends, neighbors or local contacts. The participants could decide to attend one or more of the classes or workshops so an individual could attend two, four, six or eight hours of natural yard care instruction. A list of topics addressed in each class and demonstration is included in Appendix A. The expected results are that participants will adopt natural yard care practices free of pesticides and chemicals and will also practice conserving resources through watering wisely. This document summarizes the responses from participants who attended one or more of the classes and demonstrations to describe the extent that local residents are applying what they learned to improve natural yard care and resource conservation practices.

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<sup>1</sup> City of Bothell. Program Review. Changing Public Outreach Methods Based on Evaluation Review 2016 North and South Sound Natural Yard Care Education Evaluation Report Prepared for: Snohomish County and City of Olympia December 31, 2015

## Methods for Data Collection and Analysis

The overall goals for evaluating the program are: (1) to identify if the instruction contributes to the participants gaining new knowledge and increasing their understanding of natural lawn and yard care practices and (2) to describe if the program contributes to the participants' adoption of and implementation of positive or preferred best natural lawn and yard care practices.

- ◆ **Retrospective Pre-Post measures at Classes-** At the two class sessions, participants were asked to respond to questions to identify changes in their knowledge and understanding of natural yard care practices. The format was a retrospective pre-post questionnaire where participants self-assess how much they knew prior to the educational session and what they know after the session. This tool is especially appropriate for a short educational session of several hours duration where participants can reliably recall how much they knew about a topic at the start and end of a session. It is also a preferred approach to ask participants to complete a single form and not overwhelm them with separate pre and post- tests to complete in a span of two hours.

On a four point scale participants could rate themselves as not having any knowledge that corresponded to a 1, being unsure of what they knew that was counted as a 2, being somewhat familiar that corresponded to a 3, and being well informed that counted as a 4. The average pre-class self-rating can be compared to the average post-care self-rating. It would be expected that participants would tend to have less specific topic knowledge before a class and thus rate themselves lower but at the end of class they would have increased their understanding as indicated in an increase in the average post score.

- ◆ **Statements of intention at Workshops –** Following each of the workshops/ demonstrations the participants were asked to complete statements about how well prepared they were to apply what they learned and how likely they were to use what they learned to change their yard care practices. The results are reported by summing the responses of participants. The larger numbers of participants who reported they felt extremely well prepared would indicate that the demonstrations had succeeded in providing the skills and behaviors for the participants to implement in their home yards and gardens.
- ◆ **Follow-Up surveys for Class participants and Comparison Group-** The evidence of changing local residents' garden and yard care practices actually rests with their actions and behaviors at their homes. We can ask about their intentions to act using natural yard care practices but the proof will be what they do at home. Seven weeks after the second class, the participants in the two classes were sent a follow-up survey via email with a link to complete the questions. The questions asked what practices they had started or continued as a result of attending the classes and/or attending one or two demonstrations.

In order to assess the influence of class instruction and demonstration on changing yard care actions among local residents, the results from the class participants were compared to a small sample of Bothell residents who had not attended any of the lawn care, plant selection, planting

or aeration classes or workshops. The results of comparing the participant group to the non-participant sample is included which lend support to delivering instruction to local residents with the goal of increasing use of natural yard care practices. The future data collection plan is to repeat a follow-up survey to the class participants to identify if they adopt and implement or continue any use of natural lawn and yard care practices.

## Results: Participants increased knowledge of Lawn Care Practices



In the first class on Healthy Lawns and Gardens, the participants showed the largest gains in knowledge in specific natural lawn care practices. Most participants had not been aware about the frequency of using grass fertilizer and were not informed about the hazards of phosphorus.

Class topics	Pre-class average	Post class average	Change in knowledge
Grass fertilizer once a year with grass cycling	1.38	3.83	⬆️ +2.45
Not use phosphorus on lawns	1.58	3.83	⬆️ +2.25
Improving lawn drainage	1.83	3.91	⬆️ +2.08
Lawns need 6-8 hours sun daily	1.92	3.92	⬆️ +2.00

The participants also gained new knowledge in other lawn care topics. The slightly smaller changes would indicate that more participants had some knowledge about these topics prior to the class. These are still notable gains in learning about alternatives to lawns and watering wisely.

Class topics	Pre-class average	Post class average	Change in knowledge
Groundcovers as alternates to lawns	1.71	3.63	⬆️ +1.92
Water lawns an inch of water a week in dry months	2.00	3.83	⬆️ +1.83

In addition to learning about lawn care, watering, and groundcovers the participants were also informed about healthy soil, soil testing, and improving soil structure. There were several participants who were somewhat familiar with these topics at the start of class and only one or two participants in a class of 24 felt they were well informed about these topics prior to class. The increases reflect that most participants gained new knowledge about soil and practices that build healthy soil.

<sup>2</sup> Photo source: Natural Yard Care, Seattle Public Utilities.

Class topics	Pre-class average	Post class average	Change in knowledge
Getting soil tested is first step to identifying need for amendments	2.08	3.83	⬆️ +1.75
Healthy soil stored carbon and filters out pollutants	2.17	3.74	⬆️ +1.57
Plants may be more adaptable to slopes and shady areas.	2.33	3.83	⬆️ +1.50
Using a cover crop can be a means to improve soil structure.	2.17	3.58	⬆️ +1.41

Overall, in this class on Lawns and Gardens from the Ground Up, participants showed an increase in knowledge in each topic addressed during the class. This suggests that local residents caring for their lawns and yards benefit from having this instruction available and it will potentially contribute to implementing best natural practices.

### Additional class results: Participants also gained Knowledge about Plant Choices



The second class informed the attendees about selecting the “right plants for the right places” based on several considerations specific to our northwest climate and microclimates. Participants could learn about placing plants, clustering like plants, and watering plants. Generally, more of the class attendees were somewhat familiar with the conditions that influence plant selection than there were attendees who knew something about best practices for lawn care. While there were positive gains, these were smaller increases. This corresponds to the pattern of participants knowing something about plants to knowing a great deal and feeling well informed about the specific topics.

The two topics where the class attendees had the greatest gains in knowledge were in learning about the tuna can test for hose watering volume and adding organic materials to soil. The next topic where there was a notable increase in knowledge was in teaching participants to map their gardens.

Class topics	Pre-class average	Post class average	Change in knowledge
Tuna can test to measure hose watering volume to water efficiently	1.92	3.68	⬆️ +1.76
Adding organic material to sandy soil to improve water retention	2.12	3.88	⬆️ +1.76

<sup>3</sup> Photo source: portlandnursery.com

Making a map of the garden for sun, weather, soil, microclimates	2.19	3.76	 +1.57
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In this Plant Choices class approximately half of the participants were already somewhat aware of conditions to consider in selecting plants. They increased from an average of 2.42 or 2.46 to a post-class average of 3.8 or 3.84. This reflects that 77% of the class was very well informed in plant selection at the conclusion of the class.

Class topics	Pre-class average	Post class average	Change in knowledge
Local microclimates should be considered in plant selection.	2.42	3.80	 +1.38
Clustering like plants will lead to healthier plants.	2.46	3.84	 +1.38

Nearly half of the participants were somewhat familiar with planning their garden, placing plants, and feeding plants prior to the class. In these topics, the participants increased from being aware to becoming well informed about the topics. The amount of change that conveys knowledge gain is close to one and is less than one. These results contrast to the larger gains in knowledge of 2.28 and 2.45 that were described in the class on lawn care practices where more participants gained more knowledge.

Class topics	Pre-class average	Post class average	Change in knowledge
Sun and shade are equal considerations in planning a garden.	2.84	3.84	 +1.00
Size of trees and shrubs should be considered before plant placement.	2.42	3.36	 +.94
Light, wind, access all considerations on placing plants.	3.04	3.92	 +.88
Mulching can nourish plants and protect the soil.	3.02	3.84	 +.82
Right plant in right place preferable to transplant later.	2.96	3.69	 +.73

The results above show that the average of pre-class knowledge was close to 3 corresponding to a majority of the participants being familiar with the topic or already being well informed about the topic. There were 10 participants who identified that they were already informed about considering tree and shrub size in plant placement. Similarly eight participants identified they were already well informed about correct initial plant placement rather than transplanting later. Seven participants were already well informed about the benefits of mulching before the class started.

These participants may not have gained new knowledge but they likely affirmed what they knew about the best natural practices. Other participants gained new knowledge in these and other topics as shown above in the increases from the pre class averages to the post class averages. In one topic, 92% of participants were well informed about light, wind and access all being considerations in selecting where to place plants.

## Results from October Demonstrations/ Workshops on Planting and Mulching and Aeration

At the two demonstrations/ workshops the participants could see how to implement the techniques and methods that were described in the classes. All of the workshop participants had attended at least one of the classes on lawn care or plant selection.



4

During the Planting and Mulching workshop the group of nine participants could get their hands dirty in planting and mulching plant beds. The workshops were successful in preparing the participants to use what they had learned as evident in 100% saying they were very well prepared. Nearly, as many,

89% felt they could readily apply what they heard about watering, root care and soil conditions. The same proportion felt they were very well prepared in using mulching techniques.



Photos: Laura Matter, Garden Hotline Program Manager

At the second workshop on Aeration, eight participants saw different variations and all left feeling very well prepared to use either manual or mechanical techniques. Similarly, all felt very well prepared to use one of the options demonstrated for top dressing. While there were practical tips provided on improving lawn drainage and water runoff, 63% felt very well prepared to use these guidelines and 25% felt at least somewhat prepared to use this practical advice.

The workshops reinforce the content delivered in the classes and are also an opportunity for the attendees to ask questions about applying the advice and practical tips in their own garden and yards. Approximately one third of the class participants also attended the Saturday demonstrations/ workshops. The workshops were timely as they were scheduled within a week or two of the classes with the intent of extending the participants' learning. In the future the class participants could be strongly

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<sup>4</sup> Photo source: Laura Matter, Garden Hotline Program Manager

encouraged to also attend one or both workshops with the intent of reinforcing their learning best practices to apply in their yards.

## **Discussion: Participants have adopted Natural Yard Care Practices**

There were 24 and 26 participants who completed the evaluations for the two classes and 17 of these local residents responded to the follow-up survey in early December 2018. Among respondents, 76% had attended one or both of the classes and 35% had been in one of the demonstrations. One objective was to identify if participants are putting their knowledge into action by adopting and implementing natural yard care practices.

**Maintaining and Improving Lawns-** While a number of respondents have not yet taken action to renovate or maintain their lawn, one encouraging finding was that at least half of the follow-up survey respondents have acted to improve the soil in their yard or garden. Most often they added compost to the soil but participants also used a cover crop, de-thatched, aerated, or used sheet mulch.

These survey respondents also took action to renovate or maintain their lawns. There were nearly equal numbers of respondents who used a slow release fertilizer, top dressed the lawn with compost or grass, or aerated. Eight respondents assessed the issue in their lawn health and four are considering using a seed mix such as Eco-lawn but are not yet decided. Survey respondents could have done more than one action to maintain their lawns.

**Planning for plant placement-** Four respondents have already placed plants in their gardens with attention to the width, depth, sun, shade and microclimate as taught in the Plants Class. Seven respondents have been more selective about plants and planned for future plant placement. A related finding is that ten respondents are planning to map their garden to renovate with new plants. This will be a time to apply what they heard in class about considerations for optimal plant placement. Another related finding is that five survey respondents chose plants with low watering needs which is a step toward decreasing water use.

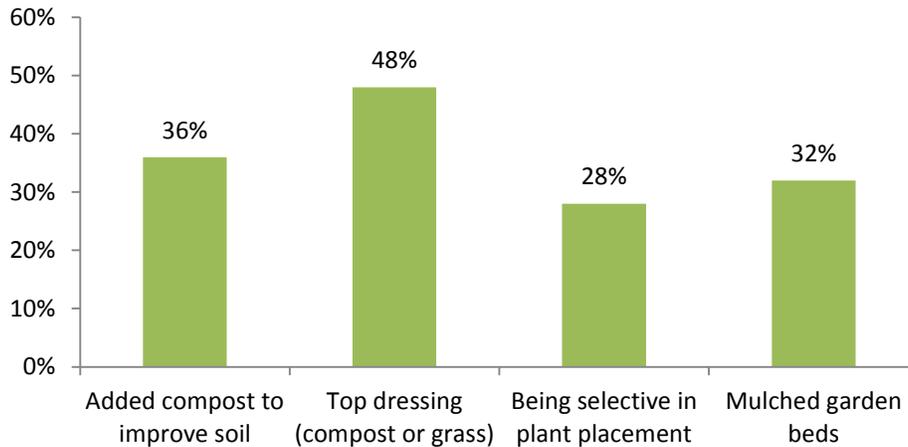
**Decreasing water use-** One aim of natural yard care classes is to support participants in learning to conserve resources including watering gardens and yards wisely. Eight participants took action to decrease water use by mulching garden beds while five aerated the lawn and five watered early or late to avoid evaporation. These are very encouraging results and the participants' early adoption of these actions may lead to them continuing these actions in the spring and summer.

Overall there are positive findings that the participants are already applying what they learned or are planning to use knowledge of natural garden and yard care practices. The chart below shows how class participants who responded to the follow-up survey are adopting or applying best practices.<sup>5</sup> In addition to the individuals represented below there were nine class participants who responded they are planning new plants but haven't yet planted and ten are planning to map their garden in the future. The sum of the respondents who have already taken action combined with those who are considering or planning future actions shows that at least half of the class is committed to natural yard care practices.

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<sup>5</sup> An n of 25 was used based on the average of 24 and 26 participants who completed the class evaluations at each of the two classes.

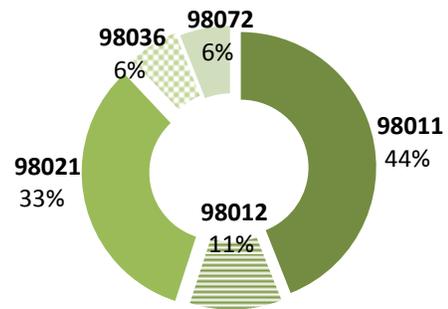
**Class participants are applying best practices in natural lawn & yard care (n=25)**



**Comparison of the Class Participants with other Local Residents**

There were 21 local residents who did not attend any of the Natural Yard Care classes or workshops who responded when sent a link to an online survey asking about their lawn and yard care practices. This formed a comparison group of non-participants. Eighteen responded to a question about where they lived and 13 non-participants lived in Bothell city limits and 5 lived outside the City limits. There were ten non-participants who answered the yard care questions so their answers are discussed below. Six respondents had lived in their homes for at least five years.

**Less than half of the non-participants lived in 98011 zip code (n=18)**



In this small sample of ten local gardeners, six respondents were already fairly knowledgeable about natural yard care. Six already knew or were implementing two preferred natural lawn and garden practices: applying mulch on plant beds and considering conditions that affect optimal plant placement. Five of these non-participants knew or were already (1) using methods for top dressing such as applying compost, (2) using a manual or mechanical aerator, or (3) mapping their garden.

In this small sample, fewer gardeners knew about testing soil to determine the need for amendments or testing the water hose volume to check for watering efficiently. This group of gardeners was also not as familiar with the use of cover crop to improve soil structure or the use of a ground cover in place of a traditional lawn. Only three of the gardeners were aware of the risk of using phosphorus on lawns because it can lead to algae in waterways.

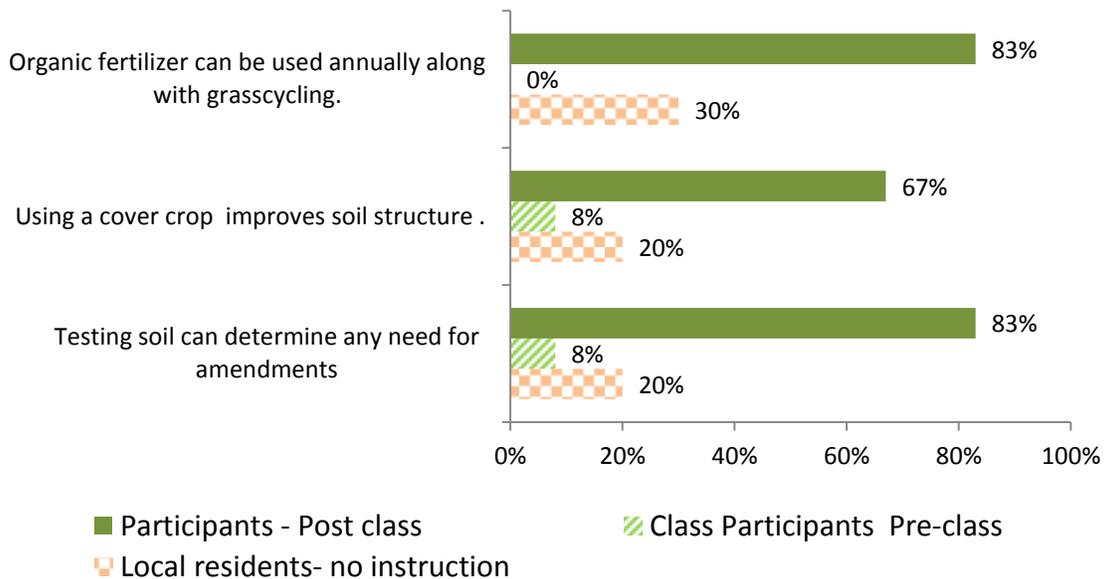
There was a much larger percent of the class participants who were well informed about natural lawn and yard care practices, following class or workshop instruction, than was found in the small sample of local residents who had not attended any classes or demonstrations. In each topic, the class participants

far exceeded other Bothell residents in their knowledge and preparation to apply knowledge in best practices.

In each of the charts below, the percent of class participants who were well informed on the topic or practice after the class (Post) is shown as well as the percent that felt informed on this topic before the class (Pre). The Post measures for the class participants exceed the non-participating local residents who responded that they were informed or already doing the selected action in their yard. The survey items are slightly shortened in the charts so the complete Natural Yard Care Questionnaire that was sent to non-participants is included in Appendix B.

After classes, a majority of class participants were well informed in applying organic fertilizer, using a cover crop or in testing soil to determine the need for amendments. This contrasts to just 30% or 20% of the local residents who had not attended any class who knew or did these practices.

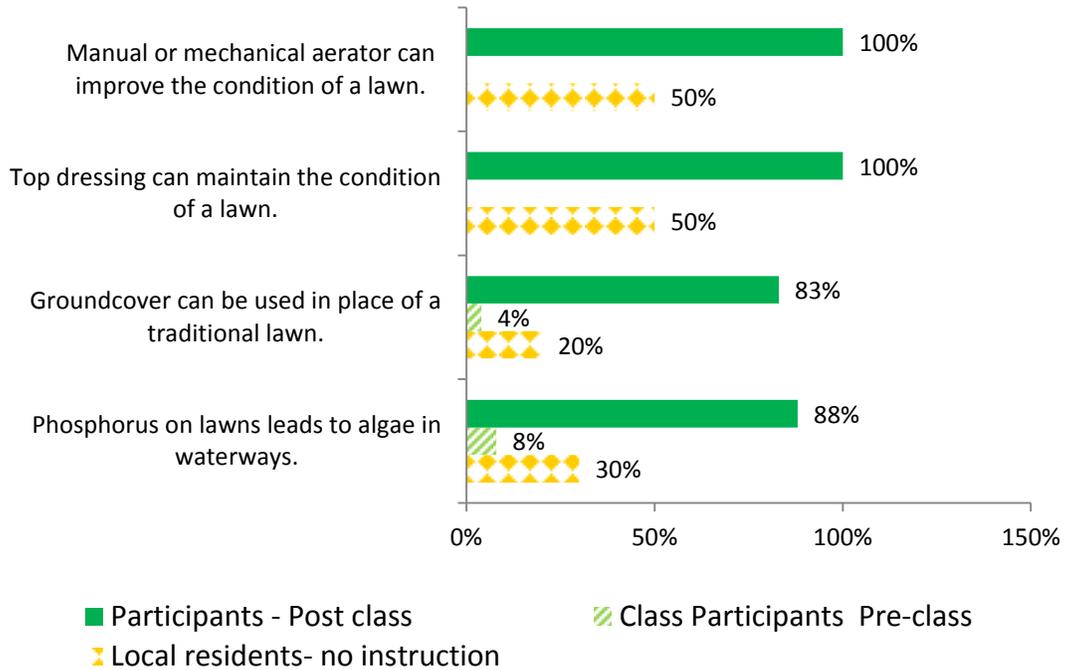
**Class participants were far more informed than local residents**



Two areas where the class participants learned new information that the comparison group of non-participants did not know were about the use groundcover in place of a traditional lawn and the harmful use of phosphorus. This is shown in the chart below where just 20% and 30% of the local residents were informed or were using these practices.

All workshop participants reported being well prepared to aerate their lawn or apply top dressing after participating in the workshops. This was not asked as a pre class question. In contrast, only 50% of non-participant local residents already knew or were already using these lawn and yard care practices.

**More Class participants than local residents knew natural lawn and yard care practices**

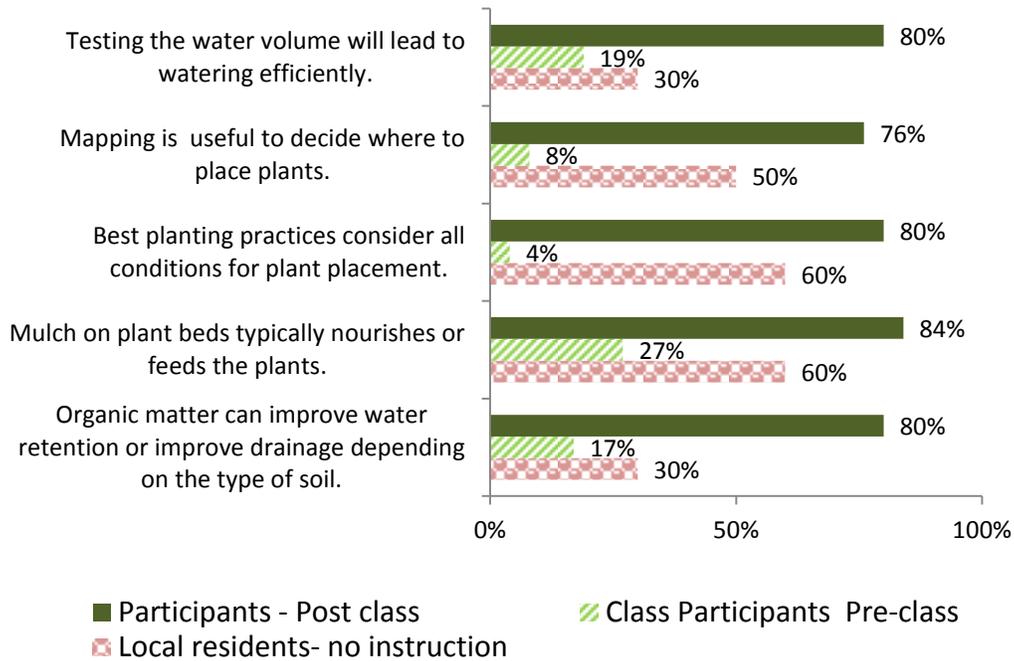


In two topic areas the percent of local residents who knew or were well informed about the topic was just slightly less than the percent of class participants who felt well informed about this topic after attending classes and demonstrations. Among the non-participants, 60% knew or were already considering many factors that influence successful plant placement and they knew about or were already mulching plant beds. This suggests that there are some local gardeners who have some prior knowledge about these topics and there may be sources of information and resources available about plant placement and about mulching plant beds.

After class 80% and 84% of the participants felt very well informed to consider conditions in plant placement and to mulch plant beds in their gardens or yards. These were very large increases for class participants who gained knowledge about plant placement and mulching plant beds as evident in only 4% and 27% feeling well informed about each of these topics prior to class.

The class participants also showed a large increase in understanding the importance of adding organic material to soil as evident in 17% initially knowing this and 80% feeling well informed about this practice after class. As evident in the chart below, 80% of class participants were well informed about the benefits of adding organic material but only 30% of the non-participant local gardener sample reported knowing or doing this action.

**Class participants became well informed about natural lawn and yard care practices that were lesser known by some local residents**



**Conclusions**

There were very large measures of change from the pre-class indicators of knowledge and action to the post-class indicators of knowledge and readiness to act. In some topic areas only 4% to 8% of the class participants were informed about a natural yard care practice prior to class but this increased to 80% after class or demonstration. The results support continuing the classes and demonstrations as a means of imparting natural lawn and yard care information to local residents.

Class participants had a very notable increase in their understanding of preparing soil with organic material (compost) and also were well informed about only using a grass fertilizer annually when done with grass cycling. These practices would contribute to reducing water run-off and protecting water quality.

In addition, the participants notably increased their knowledge and readiness to apply their knowledge about considering all factors that influence plant growth with optimal plant placement such as sun, shade, and microclimates. This new knowledge would also contribute to effectively watering plants. The class and demonstration participants also showed a large increase in knowing about measuring their water hose volume in order to water wisely and efficiently. These changes will likely contribute to the participants decreasing water use or at least using water without wasting it.

Class participants also had large gains in knowledge about building healthy soil. They learned about and practiced mulching methods that feed the soil. They also became very familiar with selecting the Right

Plant for the Right Place and they learned watering techniques. The participants' increased understanding should lead to not using any harmful chemicals so they will contribute to preventing toxic water run-off and protecting water quality.

There was a small sample of non-participants and it appears to be composed of individuals who are somewhat aware of natural lawn and yard care practices or were somewhat experienced in gardening methods. But, as evident from their responses there is still the opportunity to inform these and other local gardeners about the importance of taking action to protect natural resources through adopting and implementing natural garden and yard care practices.

## **Suggestions to Improve Classes and Future Class Topics**

The class participants who responded on the evaluations were very positive about their experience and appreciated having such knowledgeable presenters and engaged instructors. They were grateful for the expert advice and content that was specific to the Northwest and enjoyed the classes and demonstrations.

The class participants made a suggestion to hold the classes earlier in the year so gardeners can get out in better weather and to also have classes earlier in the evening. Another suggestion was to have a class in the spring to prepare gardeners to get out into their yards. There was also a request for more specific informational resources available online as well as printed materials. Some participants would like even more "how to" tips and photos in classes to help prepare for garden and yard work.

The participants also responded with their interest in new topics as well as expanding the topics that were presented this year by adding different information. In addition, the non-participants who responded to the survey also identified some topics of interest for future instruction. These local residents who had not attended classes indicated they would consider doing so in the future depending on the topic, day, and time. Suggested topics and the number of suggestions is listed below.

- ◆ Pruning (2), Managing trees, trimming
- ◆ Edible gardening, edible plants (2)
- ◆ Composting, using food scraps (2)
- ◆ Plant diseases and pests, reducing weeds without toxic weed killers (3), getting rid of moss and getting rid of moles
- ◆ Planting alternatives to grass lawns
- ◆ Container gardening
- ◆ Databases on plants
- ◆ Plants that go well together
- ◆ Pacific Northwest local plants, more on selecting plants
- ◆ Low maintenance yards with attractive plants

## **Appendix A**

### **Natural Yard Care Class and Workshop Topics**

#### **Class #1 10/2/18- Healthy Lawns and Gardens from the Ground Up**

- ◆ Healthy Soil
- ◆ Soil testing – options for testing
- ◆ Use of cover crop to improve soil structure
- ◆ Use of Grass Fertilizer
- ◆ Lawn Care- Watering your Lawn, Mowing, How much sun is needed, Lawn Drainage
- ◆ Groundcovers including seed mixes, Eco-lawn
- ◆ Selecting Plants- Slopes, Shade
- ◆ Managing Pests- Crane Flies, Red Thread

#### **Class #2 10/9/18- Smart Plant Choices for Northwest Gardens**

- ◆ Factors to consider in selecting plants and placing plants-light, wind, access, microclimate
- ◆ Plant placement- consider size of trees and shrubs, microclimate , clustering plants
- ◆ Healthy soil for plants with addition of organic material to improve drainage or buffer soil pH
- ◆ Types of soil, drainage in clay soil
- ◆ Planning a Garden- consider sun, shade
- ◆ Making a map of the garden
- ◆ Mulching garden beds – benefits of mulching
- ◆ Tuna can test to measure amount of hose watering

#### **Workshop/ Hands on Demonstration Part 1- 3<sup>rd</sup> in the Class/Workshop Series 10/13/18- Planting and Mulching**

- ◆ Best practices for planting- watering, root care, soil conditions
- ◆ Mulching plant beds
- ◆ Applying practical guides in your own garden
- ◆ Preparing to plant and mulch

#### **Workshop/Hands on Demonstration Part 2- 4<sup>th</sup> in the Class/Workshop Series 10/13/18- Aeration**

- ◆ Methods for aeration- spike or plug, manual aerator, mechanical aerator
- ◆ Top dressing techniques- Consider options of top soil, compost, grass
- ◆ Readiness to apply practical tips to improve lawn drainage, water runoff and moisture

## Appendix B Natural Yard Care Questionnaire

Hello Bothell Resident,

City of Bothell offered Natural Yard Care classes and a demonstration in October for residents including new homeowners. To assess the effectiveness of the classes and to identify the community need for more yard care classes, we invite you to answer the following questions. Your responses will be treated confidentially. To thank you for your time, if you wish to be entered in a drawing for a Northwest Maritime Garden Guide you will be directed to a separate page to enter your name and email, at the end of the survey. Thank you.

Please select one answer that best describes your gardening/yard care in the past four months		I don't know this and/or I don't plan to do this	I would consider doing this in the future.	I would like to know more about this before I decide.	I know this or I do this already	Unable to answer this
1	Testing soil can determine any need for amendments (e.g. lime, organic material)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Using a cover crop is a means to improve soil structure in my yard/garden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	A natural or organic fertilizer can be used annually along with grasscycling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	If phosphorus is used on lawns it leads to algae in waterways.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	A groundcover such as Eco-lawn or a seed mix can be used in place of a traditional lawn in all or part of the space available for a lawn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	Methods such as top dressing, applying compost or grass cycling can maintain the condition of a lawn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Using a manual or mechanical aerator can improve the condition of a lawn with the plugs left on top of the lawn and watered.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Amending the soil in a garden with organic matter can improve water retention or improve drainage depending on the type of soil.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please select one answer that best describes your gardening/yard care in the past four months		I don't know this and/or I don't plan to do this	I would consider doing this in the future.	I would like to know more about this before I decide.	I know this or I do this already	Unable to answer this
9	Mulch on plant beds typically nourishes or feeds the plants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	Best planting practices consider all conditions for plant placement (plant width, depth, water need, soil conditions, microclimates).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	Mapping a yard is very useful to decide where to place plants, shrubs, trees, lawn and/or ground cover.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Testing the water volume for the hose or watering technique used will lead to watering efficiently and effectively based on conditions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please continue with these final questions.		Not at all interested	Would depend on the topic	Would depend on day, time	Uncertain
13	How likely are you to attend a natural yard care class that is 2 hours long on a weeknight or weekend?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	How likely are you to attend a "get your hands dirty" demonstration on a garden or natural yard care topic?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. What garden or yard care topic would you most like to learn more about?

16. How long have you lived in your current home?

<input type="radio"/> Less than 6 months	<input type="radio"/> 6-12 months	<input type="radio"/> 1-2 years	<input type="radio"/> 3-5 years	<input type="radio"/> More than 5 years
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17. What is your zip code? \_\_\_\_\_

18. Would you like to be entered in a drawing to win a copy of the Northwest Maritime Garden Guide?

- NO
- YES (If yes, respondent is directed to new page with wording shown below)

Please enter in the box below the email address (or other information) so we can reach you if you win the drawing. We will contact you so you can receive the book.

We will keep the contact information you entered until one week after the drawing is completed on Dec 31, 2018.

# Natural Yard Care

## It feels great to go natural!

Our yards are our outdoor homes - fun, beautiful, great spaces for relaxing. But in taking care of them, we often use water inefficiently, produce a lot of yard waste, and overuse chemicals that are bad for our families' health and our environment. The good news is that we can save money, time, and protect our health by making small changes in the way we care for our yards and lawns.



## How to build a healthy yard

Our [natural yard care website](#) teaches you how to build healthy soil, plant right for your site, practice smart watering, eliminate the use of harmful pesticides, and practice natural lawn care. You'll also find great information on native plants and how to hire a professional landscaping company.



**Five steps to Natural Yard Care**

1. Build healthy soil
2. Plant right for your site
3. Practice smart watering
4. Think twice before using pesticides
5. Practice natural lawn care

## Skip the pesticides

Pesticides include some of the most hazardous chemicals commonly used in and around the home. Products that kill insects, weeds, bacteria and fungi may be hazardous to children, pets, birds, fish, other wildlife, and also to beneficial insects like bees and lady bugs.

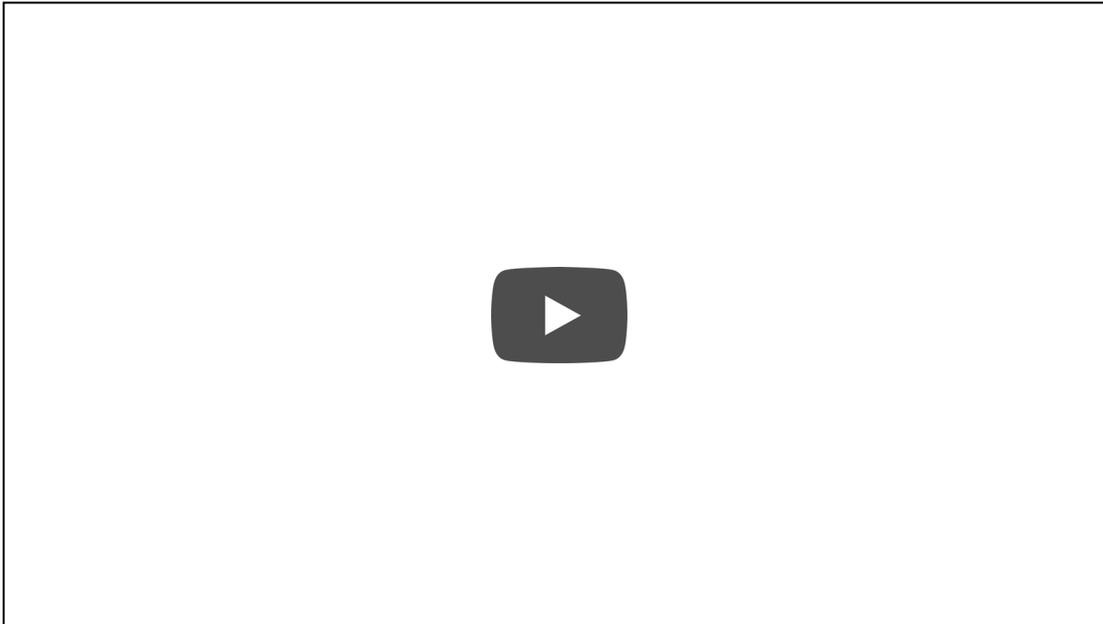
Pesticides used in the yard or at the workplace can be carried inside on shoes and work clothes and mix with house dust. Young children, who crawl on the ground and put objects in their mouths, can then ingest the chemicals. Rain and irrigation wash pesticides off of yards and carry them to streams, sometimes in amounts that can harm salmon or the aquatic organisms that are their food.

Learn how to manage pests naturally at [growSMARTgrowsafe.org](http://growSMARTgrowsafe.org).



## Save water and money

Read tips about how to save water and learn whether you qualify for any rebates through the Saving Water Partnership.



## Contact us

### Christi Cox

Surface Water Program Coordinator

[Email](#)

### Spill Hotline

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any storm drains or local streams.

Select Language

Powered by [Google Translate](#)

## Printable documents

- [Natural yard care tips \(PDF\)](#)

## How do you care for your yard?

If you have a few minutes to [answer some questions](#), it helps us understand what kind of yard care program best serves our residents. It's completely anonymous!

## Eat your weeds

Tired of those weeds taking over your lawn? Well...if you can't beat 'em, eat 'em! Most of the troublesome weeds in your yard are edible and provide some terrific nutrients for your family.



## Weeds are good for you!

Dandelions have a vitamin A content higher than carrots! And they contain the best known source of lecithin, which may reduce the risk of Alzheimer's disease and helps support liver function. For some recipes, view our [Eat Your Weeds Recipe Cards \(PDF\)](#).

For more information, please contact us or call the Garden Hotline at 206-633-0224.

# Nothing but rain down the drain!



City of Bothell™

In the City of Bothell, it is **illegal** to dump beer, other beverages, grease, oil, food, soap, garbage, paint, cleaners, water, and a long list of other things down the storm drains.

Bothell Municipal Code 18.04.260

If you see **anything other than rain** going into a storm drain, please call us at

**425-806-6750**

right away so we can keep it out of our streams.



**IS IT LEGAL TO DUMP ANY OF THESE THINGS DOWN THE STORM DRAIN?**

BEVERAGES,  
BEER & WATER

**NO.**

GREASE, OIL,  
FAT & FOOD

**NO.**

CHEMICALS &  
GARBAGE

**NO.**

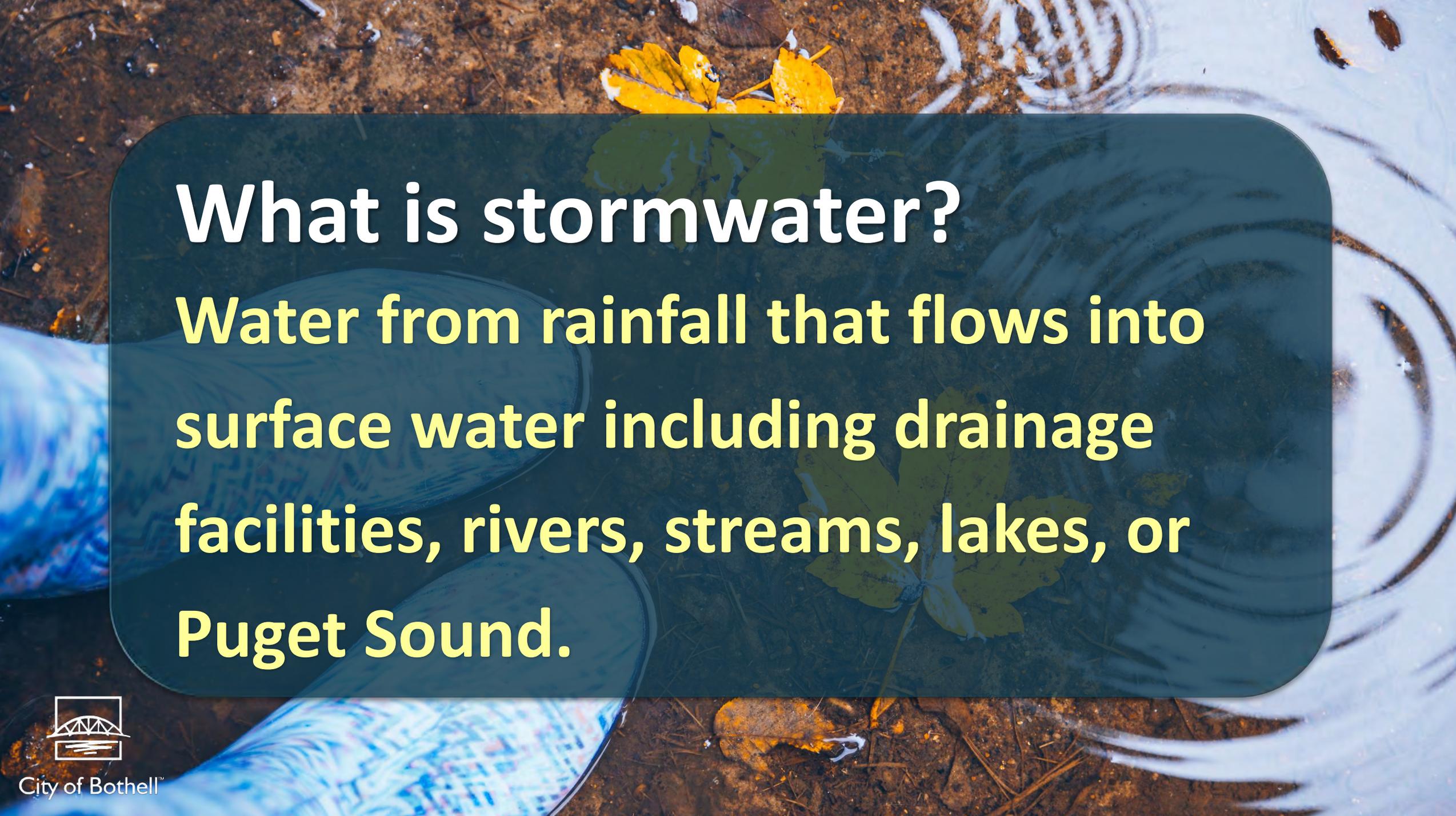
Thanks for keeping Bothell's streams clean!

[www.bothellwa.gov/reportspills](http://www.bothellwa.gov/reportspills)

# Understanding Stormwater Pollution

What you can do to help keep  
Bothell's streams healthy





# What is stormwater?

Water from rainfall that flows into surface water including drainage facilities, rivers, streams, lakes, or Puget Sound.



# What is stormwater pollution?

Anything that isn't rain that ends up in our storm drains and water bodies. A few examples:

- Oil
- Paint
- Detergents
- Gas
- Brake fluid
- Garbage
- Sediment
- Lawn chemicals
- Pet waste
- Cigarette butts
- Car wash water
- Beer



# Which of these are storm drains?



# Why does it matter?

Our storm drains carry rainwater and contaminants to our local streams, lakes, rivers, and Puget Sound...

**without any treatment.**



# Local stormwater pollution problems



- About 75% of the toxic materials come from what runs off our paved roads, driveways, rooftops, yards, and parking lots
- Millions of pounds of toxic materials enter our streams and Puget Sound every year



So...how can we keep  
our streams healthy?

Through



actions.



Check  
your  
vehicle  
for leaks



[fixcarleaks.org](http://fixcarleaks.org)



**Use a  
commercial  
car wash**



[bothellwa.gov/carwashing](http://bothellwa.gov/carwashing)



# Cut back on lawn chemicals



[naturallyardcare.org](http://naturallyardcare.org)



**Pick up  
after  
your dog**



**[bothellwa.gov/scoop](http://bothellwa.gov/scoop)**



City of Bothell

**Report  
spills**



**425-806-6750**

**[bothellwa.gov/spills](http://bothellwa.gov/spills)**





**Tell your  
friends!**



**[facebook.com/bothellcool](https://facebook.com/bothellcool)**



City of Bothell

# Remember, nothing but rain down the drain!



Christi Cox

Surface Water Program Coordinator

[christi.cox@bothellwa.gov](mailto:christi.cox@bothellwa.gov)

425-806-6790





# JOIN US FOR A RAIN GARDEN PLANTING PARTY ON OCTOBER 11

Rain gardens are popping up like crazy in Puget Sound, and more have come to Bothell! Come learn what all the hype is about - while learning the latest in plant selection, lawn reduction and other techniques like rain barrels. Professionals will be on hand for questions about how to make these ideas a reality on your own property.



## **WHEN:**

Thursday, October 11, 4-6 p.m.

## **WHERE:**

89th Avenue Northeast & Northeast  
187th Street in Bothell, WA 98011

## **COST:**

This event is FREE!

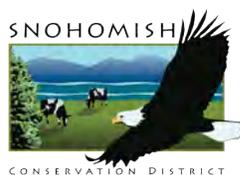
## **PROVIDED:**

Gloves, refreshments and knowledge

## **INFO AND RSVP:**

<https://snocd.org/2018BothellIRG>

Participants will be entered to win a free rain barrel!  
This is a family-friendly event.





# Calling all volunteers!

**When:** Saturday, Oct. 20 from 9 a.m. to noon

**Where:** Parr Creek between Northshore YMCA & Woodinville Montessori

**What:** Spread mulch around the young plants alongside Parr Creek

**Who:** All ages are welcome - kids under age 14 must have adult supervision

Dress for the weather and wear sturdy shoes. We'll provide gloves, buckets, coffee, and refreshments.

*Sign up online!*

[www.bothellwa.gov/ParrCreek](http://www.bothellwa.gov/ParrCreek)



City of Bothell™

Help prevent localized flooding.

# LEAVES: Keep them out of streets and storm drains.

## What's the problem?

Many residents blow or sweep their fallen leaves into the street, not realizing that they become a safety and stormwater hazard to both their property and their neighborhood.

The storm drains in your street capture, move, and release rainwater into the nearest stream to keep excess water away from your property. If leaves clog these drains, neighborhood flooding is more likely to happen.

City of Bothell has nearly 8,000 storm drains, so our crews really appreciate your help to keep them clear before and during storms.

## How can you help?

- Rake leaves into your yard waste bin.
- Use leaves as mulch on garden beds and landscaped areas.
- Turn leaves into compost.
- Join the Adopt-A-Drain Program and pledge to keep leaves out of at least four storm drains in your area.
- Tell your friends and neighbors how they can help protect their property, too.



More about the Adopt-A-Drain Program:  
[bothellwa.gov/adoptadrain](http://bothellwa.gov/adoptadrain)

Tips about mulch and natural yard care:  
[naturallyardcare.org](http://naturallyardcare.org)

Thank  
you!



City of Bothell™

# Participating in the Adopt-A-Drain Program



City of Bothell™

Welcome to the Adopt-A-Drain Program! Thanks for volunteering to help keep some of City of Bothell's 8,000+ storm drains clear.

## How to participate

To participate, choose at least four storm drains covers you would like to adopt, and check on them regularly. Make sure they're free of leaves and other debris during the fall and winter months.

## Ensuring your safety

### Location

Only work on residential streets. Stay clear of main arterials.

### Traffic

Be sure that passing traffic is aware of your presence. Always keep your back away from the street and know your surroundings. If possible, have someone else outside with you watching the traffic for your safety.

### Clothing

Try to wear light colored clothing and a safety vest.

### Time of day

Only work during daylight hours. Dawn and dusk are dangerous times to be in the street because it's harder for vehicles to see you.

### Gloves

**Always** wear gloves when clearing debris from the street and storm drains. Gloves help protect you from sharp twigs, glass, metal, and other harmful debris you might find under the leaves.

## Liability form

The City requires all volunteers to sign a liability form and log their volunteer hours. You must fill out and return the liability waiver and be sure to track all of your volunteer hours in hard copy or online. These forms are available to print or submit online at [www.bothellwa.gov/adoptadrain](http://www.bothellwa.gov/adoptadrain).

## Emergency contacts

Please call us right away if you have concerns, need to report a problem, or encounter flooding.



### Emergencies (direct threat to health)

Spill Hotline

Volunteer Coordinator (Christi Cox)

Maintenance and Operations

Solid Waste Coordinator (Sabrina Combs)

After-Hours Police Dept. Non-Emergency

### 911

425-806-6750

425-806-6790

425-488-0118

425-806-6768

425-486-1254

*Did you know?* Water that enters storm drains flows directly to the nearest river, lake or wetland without treatment. This means that any pollutants on your road, lawn, or driveway are carried right into our streams.

Updated 03/18



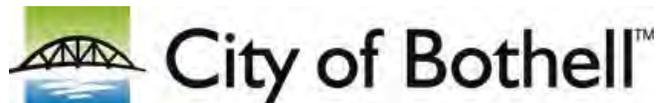
## Form Center

By [signing in](#) or [creating an account](#), some fields will auto-populate with your information and your submitted forms will be saved and accessible to you.

## Adopt-A-Drain

### Adopt-A-Drain Clearing

Thanks for your commitment to keeping Bothell's storm drains clear and helping prevent residential flooding. Use this form to let us know whenever you clear storm drains in your neighborhood.



**Your name**

**Your address**

**How many storm drains did you clear?**

**What date did you clear them?**

**How much time did you spend clearing them?**

**Any comments or questions?**

(recent windstorm, heavy rains, etc.)

Select Language ▼

Powered by [Google Translate](#)

## Do you need any compost bags for collection?

- Yes
- No

## Volunteer Sign-in Log

No file chosen

Please upload your volunteer sign-in log here if you'd rather submit your form instead of filling out the questions above.

## Need a new Sign-in Log?

[Volunteer sign-in log\\_\(PDF\)](#)

---

## Your email address

We'll contact you to answer any questions or if we have questions of our own.

## About the program

[More about the Adopt-A-Drain Program](#)

## Thanks for helping keep Bothell's storm drains clear!

Receive an email copy of this form.

### Email address

This field is not part of the form submission.

Select Language ▼

# Adopt-A-Drain Program

## What's the program about?

Adopt-A-Drain is a volunteer program that encourages residents to clear the storm drains near their home or work. To participate, volunteers adopt at least four storm drains and help keep them clear during the fall and winter to lessen the chance of flooding.

Bothell has nearly 8,000 storm drains to maintain. You can help by removing debris that would otherwise clog the drains or pollute our waterways. Sign up today! For more information contact our [Surface Water Program Coordinator](#).

## How to participate

- [How to participate in the Adopt-A-Drain Program \(PDF\)](#)
- [Required liability waiver \(PDF\)](#)
- [Volunteer sign-in log \(PDF\)](#)

## Current program volunteers

Be sure to share your storm drain clearing information with us [online](#).



## Contact us

**Christi Cox**

Surface Water Program Coordinator

Select Language ▼

Powered by [Google Translate](#)

[Email](#)

## **Spill Hotline**

Phone: 425-806-6750

Please call us right away if you see a spill. We need to try to contain it before it reaches any storm drains or local streams.

Select Language ▼

## Stormwater Management

We want you to weigh in!

We update our Stormwater Management Program annually and ask Bothell residents and businesses to review the plan and give us your feedback. We value your suggestions and consider them when we're planning our programs each year. It's also a great way for you to learn about what we're doing and how you can get involved. Check out our current plan at [www.bothellwa.gov/2018swmp](http://www.bothellwa.gov/2018swmp).

Do you want to share your comments or ask us questions about the plan? Please fill out our online form at [www.bothellwa.gov/swmpfeedback](http://www.bothellwa.gov/swmpfeedback) or just send an email to Christi Cox, Surface Water Program Coordinator, at [christi.cox@bothellwa.gov](mailto:christi.cox@bothellwa.gov).

# Stormwater Management Program



## Did you miss our Natural Yard Care workshops?

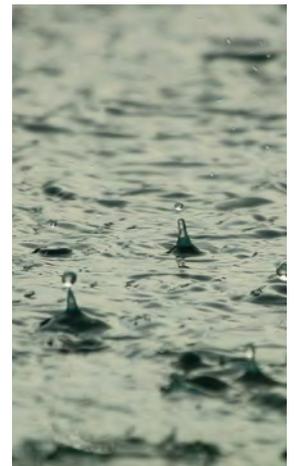
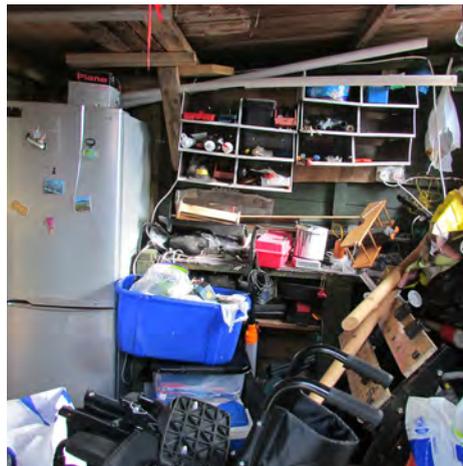
If you didn't attend any of the three Natural Yard Care workshops we held in October, we'd like to hear from you. Please fill out a short survey by Dec. 31 at <http://bit.ly/yardcaresurvey> so we can compare what you already know about yard care to the topics we covered at the workshops. Your responses are confidential, and you can enter a prize drawing. We would love to see you at our next round of workshops, likely next fall.

## Flood safety tips

With Pacific Northwest rain, flooding is a common regional problem. Help keep your family and your property safer during flood season:

- Keep street drains and storm grates free of leaves and other debris.
- Store household chemicals at higher elevations to keep them out of flood waters, especially in garages, sheds, and basements.
- Make sure any underground storage tanks are fully sealed and secure.
- Have a plan and make an emergency kit.

Find more flood safety tips at [www.bothellwa.gov/hazards](http://www.bothellwa.gov/hazards).



## Be Septic Smart

Do you have a septic system? Learn how to extend its life and keep it functioning properly with these ten essential tips.

1. **CONSERVE WATER.** The more wastewater you create, the more your soil must treat and dispose. Here are some ways to cut back on your water use:

- Wash only full loads of dishes and laundry.
- Use water-saving devices.
- Repair leaky faucets and plumbing fixtures.
- Reduce toilet reservoir volume or flow.
- Take shorter showers.

2. **KEEP ACCURATE RECORDS.** Know where your septic tank system is and keep a diagram of its location. Your local health department may be able to provide you with records of its size and location. You should also keep a record of the system's maintenance. These records are helpful if problems occur, and they will be valuable to your home's next owner.

3. **INSPECT YOUR SYSTEM ONCE EACH YEAR.** Check the sludge and scum levels inside your septic tank to be sure the layers of solids are not within the "early warning" levels. Your tank should also be checked to see if the baffles or tees are still in good condition. Inspect the drainfield periodically for odors, wet spots, or surfacing sewage. If your drainfield has inspection pipes, check them to see if there is a liquid level continually over six inches. This could be an early indication of a problem.

4. **PUMP OUT YOUR SEPTIC TANK WHEN NEEDED.** Don't wait until you have a problem. Routine pumping can prevent failures, such as clogging of the drainfield and sewage backing up into your home. Remember, having guests for the holidays means more flushing and more demand on your septic system. Using a garbage disposal increases the amount of solids entering the septic tank and requires more frequent pumping.

5. **NEVER FLUSH HARMFUL MATERIALS INTO THE SEPTIC TANK.** Grease, cooking fats and oils, newspaper, paper towels, rags, coffee grounds, sanitary pads and tampons, and cigarettes cannot easily decompose in your tank. Chemicals like solvents, oils, paint, and pesticides are harmful to the system's proper operation and may pollute the groundwater. Septic tank additives don't improve the tank's performance, and they don't reduce the need for pumping. Learn how to dispose of hazardous household waste properly at [www.hazwastehelp.org](http://www.hazwastehelp.org).



6. **KEEP ALL RUNOFF AWAY FROM YOUR SYSTEM.** Water from surfaces like roofs, driveways, and patios should be diverted away from your septic tank and drainfield area. Soil over your system should be slightly mounded to help surface water runoff.

7. **PROTECT YOUR SYSTEM FROM DAMAGE.** Keep vehicles, heavy equipment, livestock, and other heavy items off your drainfield. The pressure can compact the soil or damage your pipes. Before you plant a garden, construct a shed, or install a pool, check on the location of your system so you don't build on top of or near it.

8. **LANDSCAPE YOUR SYSTEM PROPERLY.** Don't place impermeable materials over your drainfield. Materials like concrete and plastic reduce evaporation and the supply of oxygen your soil needs for proper effluent treatment. They can also make it difficult to get to your system for any pumping, inspection, or repair. Grass is the best cover for your system.

9. **NEVER ENTER ANY SEPTIC TANK.** Poisonous gases or the lack of oxygen can be fatal. Any work to the tank should be done from the outside.

10. **CHECK WITH YOUR LOCAL HEALTH DEPARTMENT FOR HELP WITH SYSTEM PROBLEMS.** Although some malfunctions may require complete drainfield replacement, many problems can be corrected with a minimum amount of cost or effort.

Learn more about being Septic Smart at [www.bothellwa.gov/septic](http://www.bothellwa.gov/septic).



## Form Center

By [signing in](#) or [creating an account](#), some fields will auto-populate with your information and your submitted forms will be saved and accessible to you.

### Stormwater Management Program Feedback

# Stormwater Management Program Feedback



We update our Stormwater Management Program annually and ask Bothell residents and businesses to review the plan and give us your feedback.

### View the current Stormwater Management Program

[2018 Stormwater Management Program](#)

### Are you a Bothell resident?

- Yes
- No
- I don't know

### Your email address

Select Language ▼

Powered by [Google Translate](#)

**What type of \*nonpoint source pollution do you feel is the biggest problem for the City of Bothell?**

\*Nonpoint source refers to pollution that cannot be easily traced to one source or property because small amounts come from many sources and properties.

**What do you think is the most effective way to spread stormwater awareness among the general public?**

**Any other comments or concerns?**

**Where should we focus our stormwater efforts over the next two years?**

**In what way(s) would you like to be involved in this process?**



**Thanks for your feedback!**

We value your suggestions and take them into consideration when we're planning our programs each year.

Receive an email copy of this form.

**Email address**

This field is not part of the form submission.

Select Language ▼



## Form Center

By [signing in](#) or [creating an account](#), some fields will auto-populate with your information and your submitted forms will be saved and accessible to you.

### Report a Drainage Issue

## Report a Drainage Issue

Use this form to tell us about a drainage issue, whether on private or public property in Bothell's city limits. City staff will receive and review your submission during business hours (Monday - Friday between 8 a.m. and 5 p.m.). If you feel your issue is an emergency and it's outside of regular business hours, please call 425-806-6750 or 911.



City of Bothell™

Select Language ▼

Powered by Google Translate

**Address or location\***

Please provide the address or nearest location of any drainage or flooding concerns you have.

**Describe the drainage issue\***

Example: Water flows across roadway

Be brief but detailed.

**Property impacted**

Examples: Structure, road, landscaping, sidewalk

What type of property is impacted by the issue?

**How significant is the problem?**

- High - needs immediate attention
- Medium - does not need immediate attention
- Low - causes little or no damage or inconvenience
- I don't know

**Your name**

**Your address**

**How should we contact you?\***

- Email
- Phone
- Do not contact me

**Disclaimer\***

**I understand that City staff will receive and review the information I submitted only during business hours (Monday - Friday between 8 a.m. and 5 p.m.). If my issue is an emergency and it's outside of regular business hours, I can call 425-806-6750 or 911 to report it.**

- Yes, I understand*

Thank you for letting us know about your drainage concern.

**Learn more about stormwater in Bothell**

[City of Bothell Surface Water Website](#)

Find ways to reduce your chance of flooding, keep Bothell's storm drainage system working, and lessen your environmental impact on Puget Sound.

- Receive an email copy of this form.

Select Language ▼

**Email address**

This field is not part of the form submission.

\* indicates a required field

# Community Events in 2018

We've wrapped up our community events for 2018, but take a look at what we did and be sure to check back for more events in 2019.

## What we did in 2018

- First Day of Spring Celebration at Wayne Golf Course
- Earth Day Employee Event
- Citywide Open House
- Horse Creek Mitigation Planting
- Music in the Park
- Panasonic Perks at Work
- Streamside Restoration Workshop
- Sustainamania
- Sandbag Filling with Boy Scouts
- Safety Rodeo
- Healthy Lawns and Gardens from the Ground Up Workshop
- Smart Plant Choices for Northwest Gardens Workshop
- Volunteer Rain Garden Planting Party
- Hands-on Natural Yard Care Basics Demonstration
- Salmon SEEson North Creek Tour

## Surface Water's booth at Sustainamania



- Volunteer Plant Mulching at Parr Creek

## Don't miss out on next year's events!

Sign up for [Surface Water News & Volunteer Opportunities](#) if you'd like us to notify you about 2019's events, volunteer opportunities, and projects we're working on.

## Mark your calendar for 2019

**Jan. 19:** Volunteer Event (Details TBD)

**May 18:** Volunteer Event (Details TBD)

**Aug. 10:** Sustainamania

**Oct. 19:** Volunteer Event (Details TBD)



# Surface Water Social Media Posts 2018

Posted to [\\*BothellCool's social media accounts](#) by Christi Cox, Surface Water Program Coordinator

\*BothellCool is City of Bothell's sustainability program. It is made up of three staff members: one from the Surface Water Division and two from the Administrative Division. The Administrative Division's content focuses on recycling, hazardous waste, water conservation, solid waste, and sustainability. The posts that follow only include those posted by the Surface Water Division.

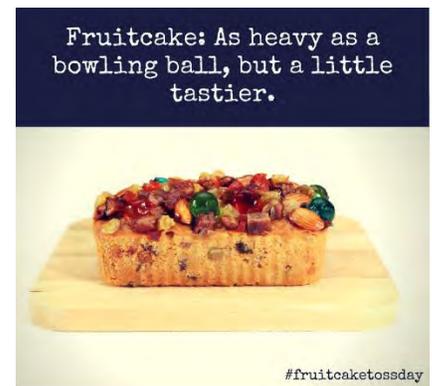
1/3/18 (FB)

Don't Drip & Drive! Learn how to look for, prevent, and repair common auto leaks at this free workshop courtesy of [Seattle Public Utilities](#).



1/3/18 (FB/Twitter)

Happy National Fruitcake Toss Day! If you've had one sitting around for a while, try to make a 3-pointer by tossing it right into your compost bin. It's all compostable...unless there really is a bowling ball hiding in there making it weigh 12 lbs. [#fruitcaketosday](#)



1/3/18 (FB/Twitter)

Someone didn't scoop the poop. [#BadDaysIn5Words](#)



## 1/4/18 (FB/Twitter)

Did you know the average dog produces 3/4 of a pound of poop each day? Remember to make sure it goes into the trash instead of into our streams. #NationalTriviaDay [bit.ly/2CnXn31](http://bit.ly/2CnXn31)



## 1/5/18 (FB/Twitter)

Feeding ducks, geese, and other birds can lead to lots of problems for the birds and for us. Let's be kind to our feathered friends. #NationalBirdDay <http://bit.ly/2CEGRz6>



## 1/7/18 (FB/Twitter)

On Old Rock Day, we'd like to thank our friends at #BothellRocks for inspiring so much creativity in our community! #OldRockDay



## 1/10/18 (FB/Twitter)

Curious about how our actions affect #PugetSound? The most recent State of the Sound report is an interesting read.



## 1/14/18 (FB/Twitter)

We couldn't help ourselves. This is Gracie and Oliver, AKA Scarecrow and Hawaiian Shirt Guy. Comment with a picture of your favorite dressed up pet! #DressUpYourPetDay #BothellPets



## 1/16/18 (FB/Twitter)

Here's a family-friendly event that teaches you about pollution from roadways and stormwater. Thanks, Puget Soundkeeper Alliance!



## 1/18/18 (FB)

Have any free time this Saturday morning? Come learn about rain gardens. Every drop counts! Thanks for the free workshop, King Conservation District and Snohomish Conservation District.



## 1/25/18 (FB)

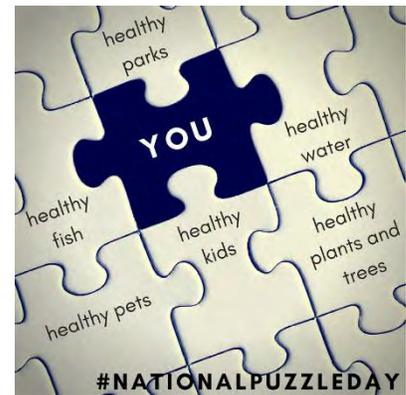
Joining fellow governments, educators, environmentalists, students, and nonprofits at this year's Storming the Sound conference. Favorite presentation so far? Zero Waste Washington talking about the damaging effects of plastics on our marine life. Puget Sound needs our help! #stormingthesound



1/29/18 (FB/Twitter)

The puzzle for a healthy Puget Sound just isn't complete without YOU. Learn how you can

help! <http://bit.ly/2rPNWZm> #nationalpuzzleday#pugetsoundstartshere



2/6/18 (FB/Twitter)

Did you know you can put disposable chopsticks in your compost bin? Or better yet, find dozens of creative ways to reuse them at <http://bit.ly/2E5irjB>. #NationalChopsticksDay



2/9/18 (FB/Twitter)

Get trained by [Tilth Alliance](#) to protect the environment! Learn about the relationship between soil, water and climate, then take action in your community by leading projects and teaching others. Become a Soil and Water Steward! Trainings offered this spring on the Eastside and in South King County. <http://bit.ly/2jnSn95>



2/9/18 (FB)

Many thanks to [Stewardship Partners](#) for bringing us together to share ideas and accomplishments in the world of green stormwater infrastructure. What an inspiring day! [#GrayToGreen](#)



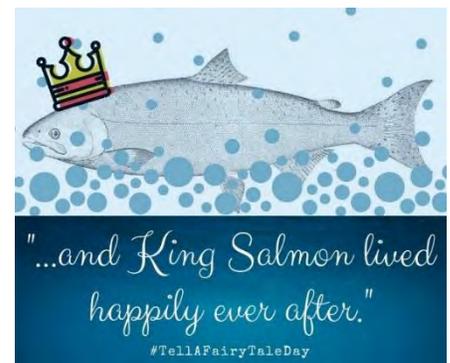
2/22/18 (FB)

Thanks for the great reminder about pet waste bags, [Recology CleanScapes!](#) The bags may be compostable, but the poop sure isn't. Always scoop it, bag it, and place it in the trash!



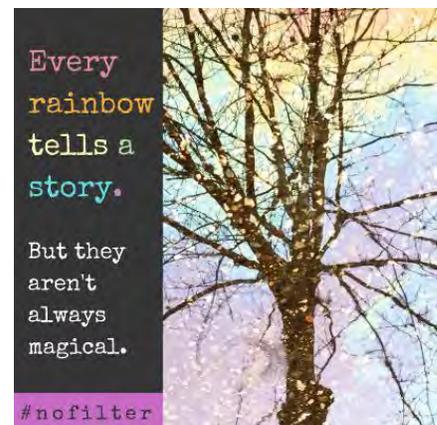
2/26/18 (FB/Twitter)

Once upon a time, in a body of water very, very close, there lived a king named Salmon. And because all the people who lived near him kept his habitat clean by preventing pollutants from going down their storm drains, he lived happily ever after. With your help, we can make this more than just a fairy tale! <http://bit.ly/2BMiK0k> [#TellAFairyTaleDay](#) [#PugetSoundStartsHere](#)



2/27/18 (FB/Twitter)

Looks pretty, right? This is a tree's reflection in a parking lot puddle of water contaminated with motor oil. Do you think we could get Alanis Morissette to use this as a lyric? Remember to check your vehicles for leaks!  
[@dontdripanddrive](#) <http://bit.ly/2GO5kAu>



3/2/18 (FB/Twitter)

I will not leave it in the park,  
I will not leave it in the dark.  
I will not leave it on a log,  
I will pick up after my dog. <http://bit.ly/2HYfPT3> #HappyBirthdayDrSeuss



3/5/18 (FB/Twitter)

Updated cover photo



3/8/18 (FB)

We love being able to work with so many awesome women at City of Bothell! Tag a woman you think is awesome too! #InternationalWomensDay



3/9/18 (FB/Twitter)

Vehicle fluids, car wash water, paint, or any other toxic chemicals need to stay out of our storm drains. Report spills to 425-806-6750. Your streams will thank you! <http://bit.ly/2FBZ223> #reportspills #healthystreams



3/12/18 (FB/Twitter)

Monet said, "I must have flowers, always, and always." We agree, Claude. Why not add a few native flowers to your garden?  
<http://bit.ly/2IcSOf8> #NaturalYardCare #PlantAFlowerDay



3/17/18 (FB/Twitter)

It's St. Patrick's Day, and who doesn't love turning things green? But if you're celebrating with slime, be sure to put it in the garbage when you're done, not down a drain. It can be toxic to our pets and wildlife, and the fish don't find it all that fun to swim in. <http://bit.ly/2FBZZ23>  
#HappyStPatricksDay



3/20/18 (FB)

Today from 10 a.m. to noon. Happy Spring, Bothell!



**MAR 20** Celebrate Spring at Wayne Golf Course  
Tue 10 AM · Wayne Golf Course · Bothell  
You like BothellCool

3/22/18 (FB)

Volunteers -- join your neighbors in Kenmore this Saturday for restoration work along the river!



**MAR 24** Sammamish River Restoration Event!  
Sat 10 AM · 7353 NE 175th St, Kenmore, WA 98...  
Shared to Bothell Community

some

3/27/18 (FB)

Spring is in the air! Here's a great class from [Snohomish Conservation District](#) that teaches you low-cost, low-maintenance gardening techniques.



3/28/18 (FB/Twitter)

Dandelions have even more vitamin A than carrots! Most of the troublesome weeds in your yard are edible and provide some terrific nutrients for your family. If you can't beat 'em, eat 'em!

<http://bit.ly/2lcSOf8> #WeedAppreciationDay



3/30/18 (FB/Twitter)

Spring Gardening Tip #73: Try "grasscycling!" Leaving grass clippings on the lawn saves you time and helps fertilize for free. Cut most lawns 2-3" high to feed deep roots, hide clippings, and shade out weeds. <http://bit.ly/2GDYEsA> #grasscycling #naturalyardcare



3/30/18 (FB/Twitter)

You could be a little BothellCooler. Apply to be our next Surface Water Program Coordinator for water quality! C'mon – water you have to lose? Learn about the job and apply at <http://bit.ly/2GJuTX0>. #waterquality#science #salmon



3/31/18 (FB)

Puget Sound starts here! Do you part in keeping car wash water, oil, fertilizer, paint, pet waste, and other toxic stuff out of the storm drains and away from our streams. <http://www.bothellwa.gov/pugetsound>



4/2/18 (FB/Twitter)

If only they could clean up after themselves, right?! But as their human best friends, it's our job to help 'em out. Scoop it, bag it, and trash it – in public and in your own yard. [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop) #scoopthepoop



4/2/18 (FB)

Calling all volunteers who like to dig in the dirt! There's a plant potting event this Sunday in Lake Stevens, hosted by Snohomish Conservation District.



APR 8 **Plant Potting Event - Volunteers W...**  
Sun 10 AM · 132 131st Ave NE, Lake Steve...  
You like Snohomish Conservation District

★ Interested

4/4/18 (FB/Twitter)

Spring Gardening Tip #112: Now is the time to renovate unhealthy lawns! If your soil is in bad shape or your turf is thin, try core aerating, overseeding, and top-dressing with ¼" of compost. <http://bit.ly/2Im5lqC> #naturalyardcare



4/4/18 (FB)

Here in the Puget Sound, we know rain. We know it a little too well. But do you know where it goes once it hits the ground? Check out this video from Puget Sound Starts Here to learn! #healthystreams#pugetsoundstartshere

Link to Drain Rangers "When it Rains, it Pours" video: <https://www.youtube-nocookie.com/embed/hqmyQtNN3I0?rel=0&showinfo=0>

4/5/18 (FB)

"The thing about the Salish Sea ... is that you can only lose it once." ~Governor Jay Inslee. Learn about Washington's efforts to save endangered orcas and restore threatened Chinook salmon throughout Puget Sound. #SalishSea #PugetSound

Link to Encyclopedia of Puget Sound's article: <https://www.eopugetsound.org/magazine/ssec2018/opening>



4/8/18 (FB)

How cool is this?! Learn to build a living green wall with [King Conservation District](#) and the Duwamish Valley Youth Corps Mentors Saturday. #greenwall #creativegardening

The Duwamish Valley Youth Corps Mentors have been learning all about Green Walls for the last 12 weeks and are ready to teach you how to build your own for \$75 or less. Come learn about air pollution in the Duwamish Valley, and how plants can help keep you healthy. The first 20 people to sign up for each workshop will get to take home a free green wall you will build at the workshop. All building materials, soil, and plants, will be provided.

Choose from the following styles:

 Succulent Frame @duwamishyouth	 Tropical Trellis @duwamishyouth	 Container Trellis @duwamishyouth	 Half Pallet Planter @duwamishyouth
--	---	--	--

**APR 14** Green Wall Construction Workshop  
Sat 10 AM · Suyama Peterson Deguchi Arch...  
You like Duwamish River Cleanup Coalition/...

★ Interested

161 people reached

Boost Event

this

4/8/18 (FB)

Ran into a familiar face at the Pacific Science Center as he was talking to a group of eager learners about slugs! It's always fun to hear you droppin' knowledge, Ciscoe (Gardening with Ciscoe). #naturallyardcare



4/9/18 (FB/Twitter)

A supposed high of 66° today? WHAT?!! Sounds like a great day to get your weeds under control. Getting rid of weeds now, before they go to seed or develop deep roots, will save you tons of time this summer. #byebyeweeds #naturallyardcare



4/10/18 (FB/Twitter)

Excellent news! This is certainly a step in the right direction. #pugetsoundstartshere

Link to Fiber One's article: [http://www.ifiberone.com/wenatchee/puget-sound-becomes-washington-state-s-first-no-discharge-zone/article\\_28b6fe00-3cf1-11e8-b35a-63fa529e9ceb.html](http://www.ifiberone.com/wenatchee/puget-sound-becomes-washington-state-s-first-no-discharge-zone/article_28b6fe00-3cf1-11e8-b35a-63fa529e9ceb.html)



## 4/11/18 (FB/Twitter)

It's National Pet Day! If you're celebrating a special dog in your life, treat 'em right! [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop)  
#NationalPetDay #IScoop #YouScoop #WeAllScoopTheDogPoop



## 4/13/18 (FB/Twitter)

If you drove SR 522 this morning, you probably noticed it was more colorful than usual. That's because of a diesel spill that left a trail for miles and miles. Our crews are almost finished cleaning up Bothell's stretch of the road (and other jurisdictions are working on the rest). This is a good reminder to let us know whenever you see stuff like this on the road – whether it's just a little or quite a lot – so Bothell's crews can clean it up right away. Call the Spill Hotline at 425-806-6750 or call 911 after hours. <http://bit.ly/2FBZZ23> #ReportSpills #KeepItClean



## 4/14/18 (FB/Twitter)

It's National Gardening Day! Whether your plants grow in the ground, in raised beds, in pots or even in old bathtubs, today is the day to show your garden some love. Did you know you already have a great resource for gardening help right at your fingertips? [The Garden Hotline](http://gardenhotline.org/) has tips, tricks, classes and answers from the experts. Check out <http://gardenhotline.org/> #NationalGardeningDay #NaturalYardCare



4/16/18 (FB)

Become a Water Watcher and learn about watershed stewardship! Sno-King Watershed Council operates a community-based water monitoring program in the north King/south Snohomish county area.

Workshops available: Introduction to Water Monitoring, Bacteriological Monitoring, Water Chemistry Monitoring, and Biomonitoring. Learn more and sign up at

<http://snokingwatershedcouncil.org/water-watchers/>  
#healthystreams



4/17/18 (FB)

Celebrate Earth Day with a free community screening of Chasing Coral, a fascinating documentary about the world's vanishing coral reefs. Learn more about the film

at [www.chasingcoral.com](http://www.chasingcoral.com). #earthday#savetheoceans



4/18/18 (FB)

Who has lived here long enough to remember Sluggy from Almost Live? We realize you may not have the same loving relationship with your garden gastropods, so here are some suggestions for dealing with them:

<http://bit.ly/2EWhUfp> #sluggy #strangerthings

Never heard of Sluggy? Get to know him at

<https://youtu.be/cSXLl8ipg0w>.



4/20/18 (FB)

Today we're celebrating Earth Day with our coworkers and feeling a little poetic. Comment with your own Earth Day haiku (or any kind of poem)!

April 23 we'll pick our favorite and send the winner a Chinook Book access code for hundreds of mobile coupons to use with your smartphone.

#NationalPoetryMonth #EarthDay #KeepItGreenKeepItClean



On

4/21/18 (FB)

Join BothellCool's team and save a fish! We're sponsoring **Sammy the Wild Steelhead** through [Survive the Sound](#). From May 7 - 18, we'll watch Sammy and his competition in their 12-day migratory race to survive Puget Sound and discover what obstacles they face along the way. Sponsorship proceeds will help [Long Live the Kings](#) restore wild salmon and steelhead. Come along on the journey with us! Learn more or join our team at [www.bothellwa.gov/sammysteelhead](http://www.bothellwa.gov/sammysteelhead) #sammysteelhead #survivethesound #longlivethekings



4/22/18 (FB)

Earth Day = Free Washington State Parks Day! Visit any of Washington's 100+ beautiful state parks today – no Discover Pass required. Saint Edward and Lake Sammamish are some of our local favorites, or take a day trip over to Fort Casey! <https://parks.state.wa.us/836/Parks-by-region> #earthday #parksforeveryone



4/23/18 (FB/Twitter)

If 't be true thou art taking Fido for a walketh on this quite quaint day, recall to pick up what cometh out of his buttocks and putteth it in the garbage. Puget Sound starts hither! [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop) #TalkLikeShakespeareDay



4/24/18 (FB/Twitter)

It's gonna be a hot one today (at least by PNW standards)! If your plants are thirsty, be sure to water them early or late to minimize evaporation. Find more tips about smart watering at <http://bit.ly/2HUQGZN>. #HelloSunshine #NaturalYardCare



4/25/18 (FB)

If you missed it on Earth Day, there's one more free community screening of Chasing Coral, a fascinating documentary about the world's vanishing coral reefs. Learn more about the film at [www.chasingcoral.com](http://www.chasingcoral.com). #savetheoceans



4/26/18 (FB)

It's Kids and Pets Day, and it's a beautiful day to go outside! But dog poop and lawn chemicals leave behind lots of stuff that can make your kids and pets sick. So be sure you give them a clean, safe yard to play in! Learn how at <http://bit.ly/2rPNWZm> #NationalKidsAndPetsDay



4/27/18 (FB)

If you've seen our latest #IRecycleSoHard video, this picture makes perfect sense to you! If you missed it, take a look and let us know what you think. <http://bit.ly/2Hv53He> #IRSH



4/27/18 (FB)

Don't miss the Washington Native Plant Society's sale and environmental fair! The theme is "Making your yard habitat friendly with native plants."  
#NativePlants #NaturalYardCare



APR 28 **WNPS CPS Native Plant Sale & Env...**  
Tomorrow 10 AM · Mercedale Park, 77th AV...  
Gardening · 222 people

4/28/18 (FB)

Perennials, trees, and shrubs... oh my! Check out the Master Gardener Plant Sale next Saturday, May 5. #NaturalYardCare#GreenThumbsUnite



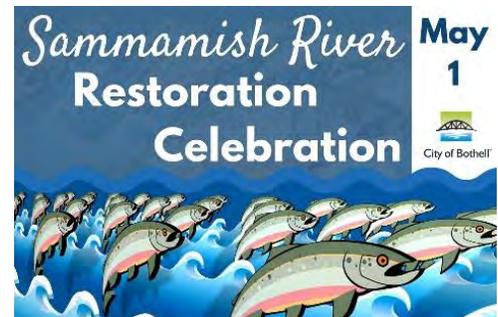
MAY 5 **Master Gardener 2018 Plant Sale**  
Sat 9 AM · Master Gardeners of WSU-Snoh...  
Shared to Bothell Community

348 people reached

4/29/18 (FB)

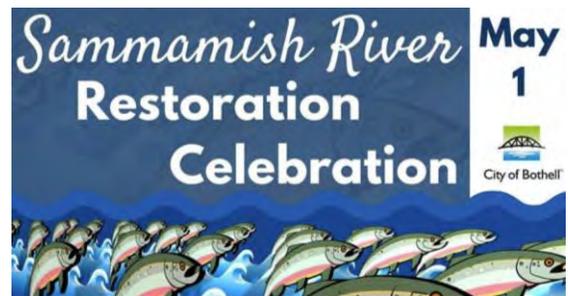
It's a salmon party! Join us at the Park at Bothell Landing this Tuesday at 10:30 a.m. See why we're celebrating at

<http://www.ci.bothell.wa.us/calendar.aspx?EID=527>



4/30/18 (FB)

Rain or shine, come celebrate May Day at the river! #WeLoveSalmon#SammamishRiver



TUE, MAY 1  
**Sammamish River Celebration**  
City of Bothell Government · Bothell

# Puget Sound Starts Here Month

5/1/18 (FB)

Day 1: It's the first day of Puget Sound Starts Here month! Earn yourself a Chinook Book mobile coupon book by pledging to do simple things that help keep our waters healthy! Take the pledge at <http://bit.ly/2FmKgQk> #PugetSoundStartsHere



5/2/18 (FB)

Day 2: So it's Puget Sound Starts Here month, and you may be wondering how you can get involved. If you've got 40 seconds, we've got 8 easy ideas for you. #PugetSoundStartsHere

Embedded "8 simple ways" video <https://youtu.be/wgNRmutS4M4>

5/3/18 (FB)

Day 3: Got slugs? Bugs? Snails? Don't just run to the store and stock up on pesticides! Find out why those uninvited guests may have chosen your yard, and learn about some natural approaches to send them on their way. <http://bit.ly/2vWqt18> #PugetSoundStartsHere



5/4/18 (FB)

Day 4: Star Wars fans, you know what day it is. We don't want to give away any spoilers about the next film, but... #PugetSoundStartsHere #MayTheFourthBeWithYou

Video about Kylo-Ren and water pollution <https://youtu.be/OBD9Ys0jcD0>

5/4/18 (FB)

Thank you for helping protect water quality throughout Bothell for the past 12 years, Andy Loch! Our next Stream Superhero will have some big shoes to fill! #BothellStreams #AquaticEcology



5/5/18 (FB)

Day 5: Think that minor little leak coming from your car is no big deal? Fixing it right away not only keeps oil and other pollutants out of our storm drains and streams, but you'll save lots of money by not letting a tiny leak turn into a huge problem. <http://bit.ly/2GO5kAu>  
#PugetSoundStartsHere



5/5/18 (FB)

Day 5: Maybe you've had a few too many cervezas celebrating Cinco de Mayo. And maybe now you're just sitting comfortably somewhere, randomly scrolling through Facebook. So maybe now you want to sign yourself up for the Puget Plunge...or nominate a friend to do it!  
#PugetPlunge

Shared event: Puget Soundkeeper Alliance's "Puget Plunge" on May 8:  
<https://www.facebook.com/events/235446703865436/>



MAY 8 Puget Plunge  
Public · Hosted by Puget Soundkeeper Alliance and 5 others

5/6/18 (FB)

Day 6: It's nostalgic, but the days of washing cars in your driveway are gone. Not only is it bad for the environment to let suds go down the storm drain, it's also against the law in Bothell (BMC 18.04.260). Learn more at <http://bit.ly/2r3pyjt> #PugetSoundStartsHere



5/6/18

Day 6: Here's a family-friendly event where you'll learn about how terrestrial restoration relates to cleaner waterways, and how you can help with local salmon recovery efforts. #PugetSoundStartsHere #SaveTheSalmon

Shared event: Puget Soundkeeper Alliance's "Pint-Sized Science" on May 7:  
<https://www.facebook.com/events/191137895552438/>



MAY 7 Pint-Sized Science: Everett  
Public · Hosted by Bean & Vine and 3 others

5/7/18 (FB)

Day 7: And...they're off! Today Sammy the Steelhead's race to Survive the Sound Migration begins! From now until May 18, we're watching Sammy and his competition in their 12-day migratory race to survive Puget Sound.

As of right now, Sammy is in a two-way tie for position 11. Yeah, that may not sound great, but he's competing against 47 other fish! He's 131 miles from the ocean, just over 20 miles behind the number one fish, Killer. We're rooting for you, Sammy! Follow Sammy's journey at <http://bit.ly/2FS7Gxl> #PugetSoundStartsHere #SurviveTheSound #GoSammyGo



5/8/18 (FB)

Day 8: The great migration is underway! Watch Team BothellCool's boy, Sammy the Wild Steelhead, as he races against his friends and other obstacles trying to Survive the Sound. He's dropped down to 13th place as of today, but we're not giving up on him! Track his progress at <https://www.survivethesound.org> #PugetSoundStartsHere #SurviveTheSound #GoSammyGo



5/8/18 (FB)

Day 8: Did you get your Chinook Book yet? All you have to do is take the Puget Sound Starts Here pledge. It only takes a few minutes and you might learn a thing or two along the way! Take the pledge at <http://bit.ly/2FmKgQk> #PugetSoundStartsHere #ChinookBook



5/9/18 (FB)

Day 9: Scientists have been hard at work developing a tool that translates animal sounds into human words. They tested it on a group of dogs that live right here in Bothell, and the results are just as we suspected! <http://bit.ly/2HYfPT3> #PugetSoundStartsHere #IfDogsCouldTalk



5/9/18 (FB)

Day 9: In a tragic turn of events, Sammy the Steelhead's journey was cut short and he didn't survive the trek. We like to think he at least went peacefully. We'll keep following his friends until the end of the race, knowing that his fishy spirit is giving them extra strength to make it to the finish line. You made us proud, Sammy! Read his blog at <http://bit.ly/2FS7Gxl> #PugetSoundStartsHere #SurviveTheSound #LongLiveTheKings



5/10/18 (FB)

Day 10: When the weather gets warm, water early in the morning or late in the evening. You'll help minimize evaporation and you won't stress your plants. Learn more smart watering tips at <http://bit.ly/2HzgihO> #PugetSoundStartsHere #SavingWaterPartnership



## 5/10/18 (FB)

Day 10: Yesterday was a hard day for all of us, dealing with the overwhelming shock and grief of losing our friend, Sammy the Steelhead, so early in the Survive the Sound Migration race. But we slept a little better knowing that he's not alone. Yesterday we also said goodbye to Fin-E-U's, Puget

Pounder, Steely, and Sea Slough. But let's transform all that sadness into some positive energy and cheer on the rest of Sammy's friends! Follow The Sammy Blog at <http://bit.ly/2FS7Gxl> #SurviveTheSound #PugetSoundStartsHere



## 5/11/18 (FB)

Day 11: You don't need to quit your day job just to take care of your yard! Natural yard care only takes five steps (and none of them involve scissoring your grass blades...unless that's your thing). <http://bit.ly/2I5569I> #PugetSoundStartsHere #NaturalYardCare



## 5/11/18 (FB)

Day: 11 Out of nowhere, Little Red zoomed into spot #2 in the Survive the Sound Migration! Overnight we lost Jaws, Scifi, Flashy, and Salmon Ella leaving 37 fish left in the race. Can Sergeant Snackbar hold onto his lead? He's only 61 miles away from the Pacific Ocean! See the rankings at <https://www.survivethesound.org/> #PugetSoundStartsHere #SurviveTheSound



## 5/12/18 (FB)

Day12: Each day we use over 5 million plastic straws in the U.S, and most of them end up in the trash or in the ocean. But Puget Sound is becoming a leader in reducing plastic pollution. Learn how at <http://bit.ly/2Ko8Gg2> #PugetSoundStartsHere #GoStrawless #LonelyWhale



5/12/18 (FB)

Day 12: Why do we care so much about steelhead around here? Because if we don't take care of them, we risk losing them. Less than 10% of the steelhead population that existed 100 years ago remains today.

We need steelhead. They're critical to Puget Sound. Low salmon populations can cause deeper issues within the surrounding ecosystem. Their presence is critical to sustaining tribal culture and treaty rights. Anglers and chefs love them. Our steelhead are an integral part of our past, present, and future! <https://ltk.org/> #PugetSoundStartsHere #SurviveTheSound #LongLiveTheKings



5/12/18 (FB)

Ladies and Gentlemen, it looks like one of our steelhead had a VERY eventful night! We heard a rumor or two about steroids, but we think that's just jealousy talking. Way to go, sk^awə!!!! #SurviveTheSound #sk^awə!

Migration Day 6/12  
Surviving Fish 36/48 - 75%

Overall Standings

Fish Ranking			
	Place	Distance to ocean	Status
 sk^awə!	1	00.01 miles	Alive
 Sergeant	2	23.15 miles	Alive
 SnackBar			

5/13/18 (FB)

Day 13: To all you BothellCool moms, may tonight's dinner not involve eating your kids' leftovers. Happy Mother's Day! #PugetSoundStartsHere #HappyMothersDay



5/13/18 (FB)

Nice job making it to the ocean, Sergeant SnackBar! Come on, Little Red...you're next! <https://survivesound.org> #SurviveTheSound

Migration Day 7/12  
Surviving Fish 33/48 - 69%

Overall Standings

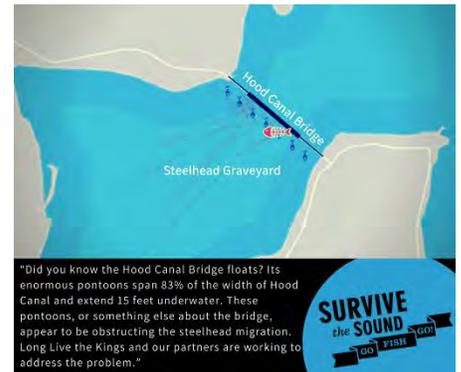
Fish Ranking			
	Place	Distance to ocean	Status
 Sergeant	2	00.02 miles	Alive
 SnackBar			
 Little Red	3	13.51 miles	Alive

5/14/18 (FB)

The good news: Five of our steelhead have made it to the Pacific Ocean!

The bad news: 19 of our steely friends have become fish food.

So why are so many steelhead dying during this migration? Many of them seem to meet their end at the Hood Canal Bridge. The bridge floats, sitting on enormous pontoons that span 83% of Hood Canal's width and extend 15 feet underwater. Could the bridge be obstructing the steelhead migration? [Long Live the Kings](#) and their partners are looking at ways to address the problem. <http://bit.ly/2FS7GxI> #SurviveTheSound



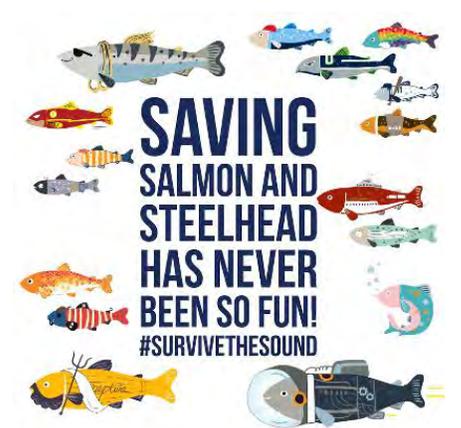
5/14/18 (FB)

Day 14: We're two weeks in to Puget Sound Starts Here month. All month long we're showing you how to keep your family, kids, pets, and water healthy. Have you taken the Puget Sound Starts Here pledge yet? <http://bit.ly/2FmKgQk> #PugetSoundStartsHere



5/15/18 (FB)

Day 15: If you've been following along with the Survive the Sound Migration, you know juvenile steelhead have it pretty rough during their two-week journey towards the Pacific Ocean. Over 80% of them die during their migration attempt! Out of the 48 fish that started this race on May 7, only 25 are still alive. Let's take good care of our waters to boost their chances of survival. <https://www.survivethesound.org> #PugetSoundStartsHere #SurviveTheSound



5/15/18 (FB)

Day 15: Backyard science is fun, but don't let it make you sick. Leaving pet waste lying around in your yard allows nasty bacteria like parvovirus, whipworms, hookworms, roundworms, threadworms, campylobacteriosis, giardia, and more to fester in your grass. Scoop it, bag it, and put it in the trash every day – in public and in your own yard. [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop) #PugetSoundStartsHere

Video of boy looking through magnifying glass in yard <https://youtu.be/xf4dLgtGAlg>

## 5/16/18 (FB)

Day 16: Meet a City of Bothell face you'll probably see around town if you haven't already. Christi works in Surface Water and helps teach the Bothell community about how to keep our streams, families, and pets healthy through simple actions. (And she feels really weird writing this in the third person. Like, REALLY weird.) <http://bit.ly/2vOMo3T> #PugetSoundStartsHere #PublicWorks4Life

Meet your Surface Water Program Coordinator

Name: Christi Cox  
Job: Teaching you how to keep our streams, families, and pets healthy  
Years with City of Bothell: 12  
Favorite part of job: Talking to people about the need to pick up dog poop  
Superhero power: Extreme sarcasm  
Guilty pleasures: The Walking Dead, 80's new wave music, & guacamole  
Spirit animal: Garden snail or a hawk  
Pet peeve: Misusing the word "literally"  
Weird habit: She puts peanut butter on hot dogs  
Motto: "Are you KIDDING me?!"



## 5/16/18 (FB)

Day 16: Our energy-conserving steelhead, Lights Off, is so good at saving energy that he's decided to use none at all for rest of the [Survive the Sound Migration!](#) You had a good run, buddy.

The latest victors include Goldie, Boom, Neptune, and Gry-Fin-Dor. With two days left, 14 fish are still fighting their way to the Pacific. Come on, guys! <http://bit.ly/2FS7Gxl> #SurviveTheSound #PugetSoundStartsHere



## 5/17/18 (FB)

Day 17: More doesn't always mean better! Healthy soil shouldn't need fertilizer. But if you're going to use it, at least try organic or slow-release fertilizer. Watch this video to learn how to measure and effectively apply fertilizer. <http://bit.ly/2HJiyiN> #PugetSoundStartsHere



## 5/17/18 (FB)

Day 17: With only one day to go, it looks like Stormy could be the last fish to make it to the ocean. Last night Sushi joined her nine successful steelhead friends and celebrated her victory in the [Survive the Sound Migration!](#)

We don't want to be the ones to say it, but it's not looking too good for the remaining 10 fish. We just lost Swedish and Mackerel.

One of the reasons these young steelhead have a hard time is because some of the waters they swim through are pretty contaminated and plagued with disease. Just like people, when fish are unhealthy, they slow down. This makes them an easy meal for predators. Remember...anything that goes down a storm drain in Bothell eventually makes its way – untreated – to Puget Sound. Nothing but rain down the drain, please!<https://www.survivethesound.org/> #SurviveTheSound



Stormy

Status: **Alive**  
Speed: **0.68 mph**  
Distance: **143.49 miles**

Fast break!

Did you know the master survival of steelhead and Chinook and coho salmon has declined throughout the Salish Sea including Puget Sound and the Canadian waters of the Strait of Georgia to the north? This is why ISTR's Salish Sea Master Survival Project is an international endeavor. We work closely with the Pacific Salmon Foundation, our Canadian counterpart, on this project, to align work in the Strait of Georgia and Puget Sound as we work to address this critical issue.

Victoria  
Port Angeles

So close...yet so far away!

SURVIVE the SOUND Migration GO FISH!

5/17/18 (FB)

Ever been to the Mercer Slough Nature Park? If you haven't, here's a perfect opportunity! Learn from a park ranger about all the aquatic and terrestrial mammals that live there. #YouOtterCheckItOut#PugetSoundStartsHere

Shared event: Mammals of Mercer Slough



5/17/18 (FB)

Because fish are fun!

Link to <https://www.seattletimes.com/education-lab/salmon-migration-lessons-like-fantasy-football-for-fish-with-2000-classrooms-playing/>



5/18/18 (FB)

Day 18: Today is the last day of the Survive the Sound Migration! Out of 48 juvenile steelhead, 14 made it to the Pacific Ocean. We learned a lot about steelhead during this 12-day journey and hope you did, too.

We'll follow a new set of young steelhead next May when another migration begins. If you missed it, check out Sammy's the Steelhead's blog to learn about the migration at <http://bit.ly/2FS7Gxl> #SurviveTheSound#LongLiveTheKings



5/18/18 (FB)

Day 18: This poor storm drain. Looks like someone didn't realize that these pollutants will travel untreated through the storm system and straight into our streams, lakes, and rivers. If you see a spill, let us know right away by calling 425-806-6750. <http://bit.ly/2FBZZ23> #PugetSoundStartsHere



5/19/18 (FB)

Day 19: Pesticides might get the job done, but they certainly aren't your only option. Keep kids, pets, families, wildlife and streams healthier by skipping the chemicals. Find alternatives at <http://bit.ly/2vWqtI8> #PugetSoundStartsHere

Link to Skip the Pesticides video:  
<https://youtu.be/clc3Qb7wJw0>



## 5/20/18 (FB)

Day 20: Calling all super-scooping pet owners! Comment with a selfie of you and your favorite pet – whether it's a dog, cat, hedgehog, llama...whatever! Our top three favorite pics will get a Chinook Book mobile coupon access code. Pics accepted until May 23 at 7 a.m. <http://bit.ly/2HYfPT3> #PugetSoundStartsHere #SuperScooperSelfie



## 5/21/18 (FB)

Day 21: When you wash your car in the driveway, you're not just washing your car in the driveway. Those suds make their way down your driveway, into the street, and straight towards a storm drain. Once they go down the drain, they end up in our streams, lakes, and rivers. Please wash responsibly. Our fish are tired of hiccupping! <http://bit.ly/2r3pyjt> #PugetSoundStartsHere #OnlyRainDownTheDrain



## 5/22/18 (FB)

Day 22: Meet another City of Bothell face you might see around town! Tony works with our local and mobile businesses teaching them how to be safe when it comes to storing hazardous materials and preventing spills. And the pictures may not show it, but he has perfect hair. <http://bit.ly/2FBZZ23> #PugetSoundStartsHere #PublicWorks4Life

**Meet your Surface Water Program Coordinator**

Name: Tony Benson

Job: Helping businesses navigate current regulations and access hazardous waste resources

Years with City of Bothell: 7

Favorite part of job: Putting you in a spill kit today! \$0 down, 0% APR!

Superhero power: Speed walking

Guilty pleasures: Converse All Stars, Taylor Swift, chocolate oranges

Spirit animal: Tiger, naturally

Pet peeve: Bird droppings on cars

Weird habit: Sits at a standing desk

Motto: "Never tell me the odds!"

Coolest 6-year old in town.

Broken clutch? No problem.

Perfect hair under the hat.

## 5/23/18 (FB)

Day 23: City of Bothell doesn't encourage pressure washing, but if you need to do it, here are a few guidelines to follow. Remember – only use cold water, not soap, zinc, or other chemicals. Be sure to have a plan before you start washing. Get yourself a free Chinook Book by taking the pledge to protect storm drains and Puget Sound at <http://bit.ly/2FmKgQk> #PugetSoundStartsHere

**how to pressure wash responsibly**

**\*DON'T USE SOAP OR CHEMICALS**

**before you wash**

- Absorb oil spots with kitty litter (or other absorbent) and sweep up
- Sweep up and dispose of trash, debris and dirt
- Place filter fabric on storm drain to catch debris
- Set up gravel bags around storm drain to anchor filter fabric
- Place spill boom to absorb oil in wash water

**while washing**

- Use cold water only (NO SOAP OR CHEMICALS)
- Only discharge filtered water to storm drain

5/23/18 (FB)

Does your non-profit need an easy fundraising idea? Because May is Car Wash Awareness Month, you can buy \$2 commercial car wash tickets to sell to your supporters. Learn more and buy your tickets at <http://charitycarwash.org/>. #PugetSoundStartsHere #OnlyRainDownTheDrain



5/23/18 (FB)

We're celebrating National Public Works Week! Here at BothellCool, we're beyond proud to be part of this family! <http://www.bothellwa.gov/pw> #NPWW#PowerOfPublicWorks



5/24/18 (FB)

Day 24: QUIZ TIME! Are flushable wipes really "flushable?" Nope, and we don't recommend you test the theory unless you want to do some damage to your septic system. Learn how to be Septic Smart at <http://bit.ly/2FmsjkM> #PugetSoundStartsHere #SepticSmart



5/25/18 (FB)

Day 25: Has your Wisteria gone wild? Hibiscus become high-maintenance? Make gardening easier by choosing native plants. <http://bit.ly/2JB8clm> #PugetSoundStartsHere #NaturalYardCare



5/25/18 (FB)

The more you know! #SecretLifeOfTrees #PugetSoundStartsHere

Shared article <http://www.washingtonnature.org/fieldnotes/two-minute-takeaway-what-stormwater-benefits-do-trees-provide>

 The Nature Conservancy in Washington  
May 11 at 3:24pm · 🌐

The trees we walk by in our cities and towns provide a wide array of benefits — beauty, habitat for our animals and cleaning the air we breathe. But one benefit is often overlooked.



WASHINGTONNATURE.ORG

**Two Minute Takeaway: What Stormwater Benefits do Trees Provide?**

[Learn More](#)

5/26/18 (FB)

Day 26: Feel like you're never going to get rid of all those weeds? If you can't beat 'em, eat 'em! Did you know red clover is full of protein?! Find more recipes at <http://bit.ly/2rgmK2n>. #PugetSoundStartsHere #EatYourWeeds



**Clover Lemonade**

- 4 cups fresh clover blossoms
- 1 gallon of water
- 2 cups honey (1 lb) or sugar
- 1 1/2 cups lemon juice

- Gently simmer clover blossoms in a covered pot for 10 minutes.
- Add honey, stirring until it dissolves.
- Cover and let steep and cool for several hours or overnight.
- Add lemon juice and chill in the fridge.

**Enjoy!**

5/27/18 (FB)

Day 27: You know that feeling when you get in the car after playing outside on a warm day, and all of a sudden that unmistakable smell hits you? You take a cautious whiff and immediately realize you stepped in something awful. And to make matters worse, you already got some of it on your floor mat.

Don't be the person who ruins someone else's day...be a Super Scooper!  
<http://bit.ly/2HYfPT3> #PugetSoundStartsHere #ScoopIt



Oops.  
Sorry about that.

Best friends don't let best friends leave poop on the ground.



5/28/18 (FB)

Day 28: Since today is a day of remembrance, we're reminding you to take the Puget Sound Starts Here pledge to show your love for this beautiful region we call home.  
<http://bit.ly/2FmKgQk> #PugetSoundStartsHere #MemorialDay



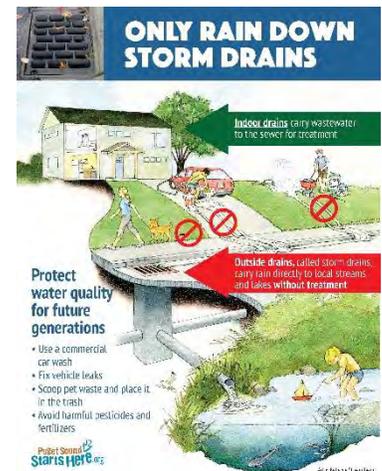
5/29/18 (FB)

Day 29: Sometimes Mr. Yuk stickers aren't enough. Keep your kids and pets safer by skipping the heavy chemicals altogether. Check out some easy recipes for greener cleaners at <http://bit.ly/2jj9Zy> #PugetSoundStartsHere #GreenCleaning



5/30/18 (FB)

Day 30: If you wouldn't want to swim in it, don't put it down the storm drain. And remember...only rain down the drain! #PugetSoundStartsHere #OnlyRainDownTheDrain



5/30/18 (FB)

Do you live near a stream or wetland? Want to learn how to help the environment, make your property look nicer, and lower its maintenance needs? Restoration experts will teach you how at this FREE workshop. #HealthyStreams #KingConservationDistrict

Shared KCD's event



TUE, JUN 5  
Beautify & Care for Your Streamside Property - Bellevue

★ Interested

5/31/18 (FB)

Day 31: It's the final day of Puget Sound Starts Here month! Thanks for following BothellCool each day to learn simple things you can do to help protect our streams, kids, pets, community, and Puget Sound. Small changes add up to a big difference! Remember to take the Puget Sound Starts Here pledge at <http://bit.ly/2FmKgQk>. #PugetSoundStartsHere



6/1/18 (FB)

Summer starts later this month, and that means we're getting into car washing season. Find tips on how to wash your car responsibly at <http://bit.ly/2r3pyjt>. Remember...nothing but rain down the storm drain! #CommercialCarWash

Link to commercial car wash video <https://youtu.be/EBGPeCI9Pgg>

6/3/18 (FB)

Get your gloves, your germinators, and your green thumbs ready! Time to go play in the dirt. Need any gardening advice? Check out [The Garden](#)

Hotline at <http://gardenhotline.org/>. #NationalGardeningWeek



6/4/18 (FB)

Not to start out the week with a downer, but toxic pollution is one of the biggest threats facing Puget Sound's Southern Resident orcas.

You can learn about the impacts toxics have on orcas, where these toxics are coming from, and how you can be part of the solution. #PugetSoundStartsHere

Shared event: Our Toxic Orcas



6/11/18 (FB)

You have a loaf of bread, you're at the park, and there are ducks. We see where this is going. But before you feed those ducks, you should know it will do a lot more harm than you may realize.

Please don't feed the ducks. Learn more at [www.bothellwa.gov/ducks#NaturalWaddlers](http://www.bothellwa.gov/ducks#NaturalWaddlers)

Link to duck feeding video: [https://youtu.be/miSVuK\\_3VoE](https://youtu.be/miSVuK_3VoE)

6/12/18 (FB)

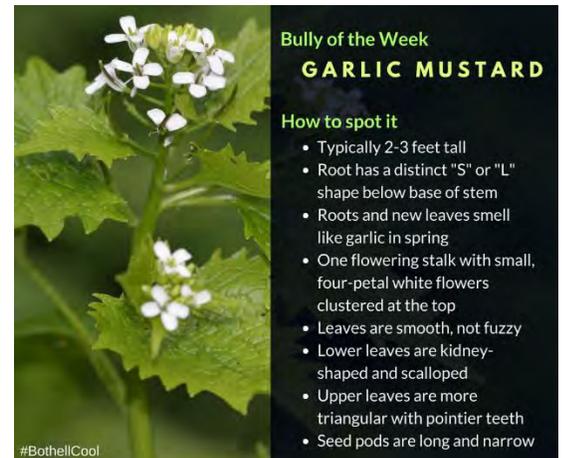
We've got our copy. How about you? "Kids around the region are learning about the Salish Sea thanks to a new book that is being offered - in many cases free of cost - to Washington schools and libraries. *Explore the Salish Sea* inspires the next generation to appreciate and perhaps someday protect the environment close at hand." Read the full story at <http://bit.ly/2LKjXHI>.

#SalishSea #StuffWeNeedToKnow



6/13/18 (FB)

Hopefully you won't see one of these in your garden, but if you do, you should let King County know right away! Garlic Mustard is a Class A noxious weed in King County (which is code for "get it out of here"). To report it online or to learn more about it, go to [www.kingcounty.gov/weeds](http://www.kingcounty.gov/weeds). #WeedYourGardenDay #NoBulliesAllowed



6/14/18 (FB)

Remember our Garlic Mustard post from yesterday? It's not the only plant that needs to get lost. Check out King County's list of the worst weeds, see pictures showing you what to look for, and learn how to get rid of these pests before they go to seed. #WeedsBeGone#NaturalYardCare

Link to King County's Noxious Weeds Blog "Noxious weeds to watch for in June": <https://kingcountyweeds.com/2018/06/07/noxious-weeds-to-watch-for-in-june/>

6/15/18 (FB)

Fun Fact Friday: You wouldn't think parachutes and beavers had anything to do with each other, but they do! Find out why at <http://bit.ly/2JD1EHE>. #WhatToDoWithAllTheseParachutes

Link to video Parachuting Beavers: <https://youtu.be/RhdHuonTc8Y>

6/17/18 (FB)

Earth-friendly habits start at home. Thank you, BothellCool dads, for teaching your kids what sustainability is all about! Happy Father's Day! #BothellCoolDadsRock



6/18/18 (FB)

We've been putting it off, but It's time we talked to you about the birds and the bees...and the butterflies and the bats. Because it's National Pollinator Week! Did you know that these pint-sized pollinators provide one out of every three bites of food we eat? Say thanks by planting native plants, supporting local farms, and telling your friends about the importance of pollinators. [www.pollinator.org](http://www.pollinator.org) #PollinatorWeek



6/19/18 (FB)

We're giving a shout-out to these busy bees and how hard they work to pollinate! But they don't do it alone – they get help from other six-legged friends like beetles, flies, ants, wasps, moths, and butterflies. Check out [www.pollinator.org](http://www.pollinator.org) to learn more. #PollinatorWeek

Link to The Amazing Honey Bee video: <https://youtu.be/5ZTIMgw3xoE>

6/20/18 (FB)

If you've been down to Wayne Golf Course, you've probably seen this guy or one of his friends hanging out. If you stay long enough, you might just get a sneak peak of his upcoming Netflix comedy special. <http://bit.ly/2HYfPT3#WhoKnewEaglesWereFunny> #NationalAmericanEagleDay



6/21/18 (FB)

Cheers to bats! Without them, your happy hour glass might be empty. Check out [www.pollinator.org](http://www.pollinator.org) to learn about what else pollinators do for the world. #PollinatorWeek

Link to Bats Pollinate video: <https://youtu.be/qRCscGyRZcg>

6/21/18 (FB)

Response to Bothell Community post: "To whoever used my garbage can to throw their dog poop away - my initial response was to be annoyed, but on second thought... I have my own dog's poop in there anyway and we appreciate you picking yours up. So thank you for using my can! (I also know it sucks to carry poop for the rest of the walk lol)"



**Christianne Cox** If you live in Bothell city limits, you can take the Super Scooper Pledge and get a free "We Scoop" sticker to put on your garbage can. It only takes a few minutes, and it helps people know whether your garbage can is dog-poop friendly to passers-by. <https://www.surveymonkey.com/r/JHQT3L7>

SURVEYMONKEY.COM

**Bothell's Super Scooper Pledge Survey**

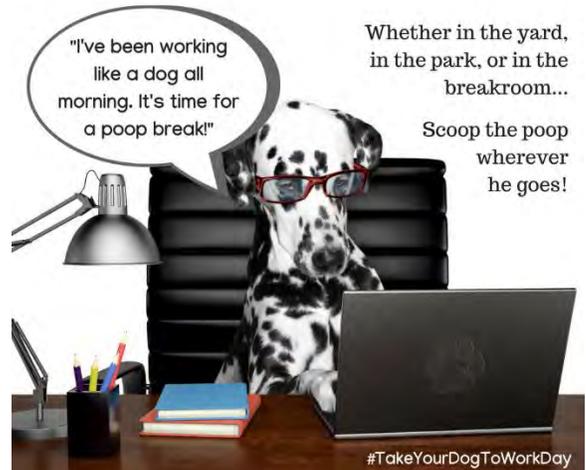
6/21/18 (FB)

We recently saw a post about dog poop etiquette and whether it's okay to put bagged pet waste in someone else's trash can while you and your pup are out on a walk. If you're a Bothell resident and you'd like to let passers-by know that your trash can is pet poop friendly, you can get a "We Scoop" sticker to put on your can! Just take the Super Scooper Pledge at <http://bit.ly/2Il8Y63> and we'll mail you a sticker. #WeScoop #PickThat%&@\$Up



6/22/18 (FB)

Dalmatians behind desks can only mean one thing - it's Take Your Dog to Work Day! Enjoy crunching numbers with your corgi or pushing pencils with your pug...just don't forget to pack their poop bags. <http://bit.ly/2HYfPT3#ScoopIt>



6/22/18 (FB)

Looking for something fun to do this weekend? Swing over to Kenmore, celebrate a newly renovated park, and jam out with a brass band! #NeighborlyNeighbors



SAT, JUN 23

**Moorlands Park Ribbon Cutting and Musical Performance**

★ Interested

You like City of Kenmore - Government

6/22/18 (FB)

Updated BothellCool profile picture to celebrate Pride Month



6/23/18 (FB)

There's a reason Himalayan blackberry earned the title of June's "Weed of the Month." You see it everywhere in the Pacific Northwest, but do you know how it got here in the first place? Watch and find out, then learn more about it at <http://bit.ly/2JNeSS2>. #NaturalYardCare #LosingTheBattle #WeLikeBlackberryPieToo

Link to Himalayan blackberry video: <https://youtu.be/hVDxvfv2fzc>

6/23/18 (FB)

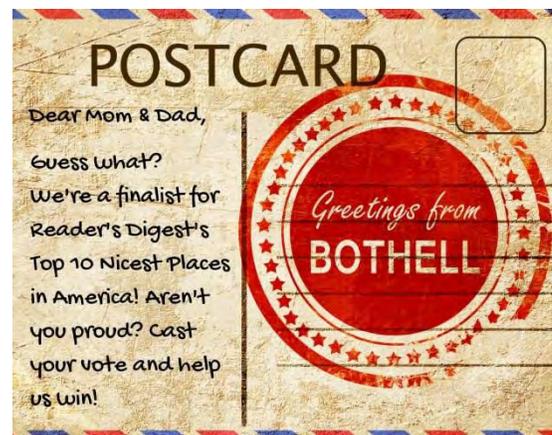
Awww, we're blushing! #YouGuysRock

*BothellCool received its 900th "like"*



6/24/18 (FB)

Did you vote yet? Help the rest of the nation see why Bothell is a finalist for Reader's Digest's 10 Nicest Places in America! Read more and vote at <https://www.10best.com/.../.../readers-digest-nicest/bothell-wa/#WellDeserved>



6/24/18 (FB)

To wrap up #NationalPollinatorWeek, Christi hung out with these beautiful butterflies at Woodland Park Zoo's Butterfly Garden today. One even tried to leave with us! #WeAlreadyHaveAPet

Video from Butterfly Garden: <https://www.facebook.com/BothellCool/videos/2138989466141717/>

6/25/18 (FB)

Sure, it may not be the weather you were hoping for on a summer Monday, but there's always a bright side! <http://bit.ly/2IcSOf8>#YourLawnAndGardenLovelt #HoorayForRain



6/26/18 (FB)

This morning our Storm Operations and Surface Water crews spent some time playing in the Sammamish River to restore some bare wetland habitat along the banks. Some of the planting areas were less than cooperative, but donuts, energy bars and coffee helped us push through. We can't wait to revisit this area in a few months and see what Mother Nature has done with it! #WishMyBootsWereTaller #WetSmellySocks



6/27/18 (FB)

Sure, sunglasses make you look cool. But you can be even cooler by being BothellCool and picking up after your pup! Post a sunglasses selfie of you and your dog and we'll choose a winner to receive a pet waste bag dispenser for your leash. Winner will be announced July 2. <http://bit.ly/2HYfPT3> #NationalSunglassesDay #SunglassSelfie #WeScoop



6/28/18 (FB)

Knotweed's a pain,  
And so is Scotch broom.  
Blackberry, poison-hemlock...  
Prepare to meet your doom.

Now is the perfect time to eradicate these invasive weeds! Put 'em in check now before they cause major problems. Learn more about them at <http://bit.ly/2K7J2Py>. #NotInMyYard



6/30/18 (FB)

Dandelions may have low standards, but you don't have to. Learn how to deal with weeds naturally at <http://bit.ly/2r6jvKZ>. #NaturalYardCare #GrowSmartGrowSafe



7/3/18 (FB)

The parade is almost here! When crews open up the east and west sides of the Multiway Boulevard for chairs tomorrow, please keep your chairs - and your feet - out of the rain gardens. These plants are still young, especially on the east side, and still need lots of TLC to survive. And if you're reading this wondering what the heck a rain garden is, check out [www.bothellwa.gov/raingardens](http://www.bothellwa.gov/raingardens) #ChairShaming #SaveTheRainGardens #BeBothellCool #FreedomFestival



7/4/18 (FB)

Downtown Bothell is the place to be! With all the extra people and pets at the parade, be a patriotic pup owner and pack some extra poop bags for your pooch. You can even take the Super Scooper Pledge at <http://bit.ly/2l18Y63>. Happy Independence Day! #ScooptIt #WhyDoesMyShoeStink #FreedomFestival



## 7/5/18 (FB)

Natural Yard Care Workshops added as events on BothellCool's FB page:



**OCT 2** Healthy Lawns and Gardens from the Ground Up  
Public - Hosted by BothellCool · 1 co-host pending [?]

Interested ✓ Going Share

Tuesday, October 2 at 7 PM - 9 PM

Bothell Operations Center, 21233 20th Ave SE, Bothell, WA 98021 Show Map

Hosted by BothellCool  
Typically replies within a day Message Host

Free www.eventbrite.com Find Tickets



**OCT 9** Smart Plant Choices for Northwest Gardens  
Public - Hosted by BothellCool · 1 co-host pending [?]

Interested ✓ Going Share

Tuesday, October 9 at 7 PM - 9 PM

Bothell Operations Center, 21233 20th Ave SE, Bothell, WA 98021 Show Map

Hosted by BothellCool  
Typically replies within a day Message Host

Free www.eventbrite.com Find Tickets



**OCT 13** Hands-on Natural Yard Care Basics  
Public - Hosted by BothellCool and Tilth Alliance

Interested ✓ Going Share

Saturday, October 13 at 10 AM - 2 PM

Centennial Park  
1129 208th St SE, Bothell, Washington 98021 Show Map

Hosted by BothellCool  
Typically replies within a day Message Host

Free www.eventbrite.com Find Tickets

## 7/6/18 (FB)

Whether you're rockin' a 2018 Prius or a 1989 Pontiac, please wash it responsibly to keep pollutants out of our streams. [www.bothellwa.gov/carwashing](http://www.bothellwa.gov/carwashing) #NothingButRainDownTheDrain

"No matter what you drive" car washing video: <https://youtu.be/DLrUVB6Dbj0>

## 7/9/18 (FB)

Leaving grass clippings on the lawn works best in dry weather. So if wet clumps stopped you in the rainy spring, try "grasscycling" again this summer. <http://bit.ly/2lcSOf8> #NaturalYardCare #MulchingMower



## 7/10/18 (FB)

It's so pretty, but looks can be deceiving. Purple loosestrife is King County's Noxious Weed of the Month. "Purple loosestrife does not play well with other plants and can completely dominate the areas it invades." It's a Class B Noxious Weed and requires control, which means you should let King County know if you find it somewhere. To learn more about it or to report a sighting, check out <http://bit.ly/2N2RH3i>. #NoBulliesAllowed #WeedsBeGone



7/11/18 (FB)

If you're heading over to the Movies at Marymoor Park tonight to watch Jumanji, swing by King County's noxious weed booth while you're there. They've got noxious weeds labeled so you can see what's what, and they can answer your questions about how to get rid of them. #GoGreenNight #KingCountyParks

Shared event: King County Parks – Movies @ Marymoor



JUL 11 Jumanji at the Movies at Marymoor Park  
Public · Hosted by Movies at Marymoor Park

★ Interested ✓ Going Share ▾ ⋮

🕒 Today at 6:30 PM - 11:59 PM  
Starts in about 11 hours · 67° Sunny

📍 Movies at Marymoor Park  
6046 W Lake Sammamish Pkwy NE, Redmond, Washington 98052 Show Map

7/11/18 (FB)

Bothell Storm Operations knows the city's storm drains all too well. After inspection, they're cleaning this one out to remove any debris and pollutants that would otherwise dump out into the nearest stream. Thanks for helping keep our streams and rivers healthy, guys! Learn how you can do your part at <http://bit.ly/2rPNWZm>. #HealthyStreams #RockinTheOrange



7/12/18 (FB)

Identify bugs before you spray, squash, or stomp 'em! Many of them are good guys who eat pests. Learn which ones are helpers at <http://bit.ly/2Jytyjv> #NaturalYardCare #ByeByeAphids



7/13/18 (FB)

Don't be ridiculous! No one wants to step in dog poop, not to mention how much of a health risk it is for kids, pets, and families when you leave it lying around. Scoop it, bag it, and put it in the trash. [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop) #SuperScooper #PickUpThePoo

Linked to Ridiculous video: <https://youtu.be/F7kfGHB-l30>

7/14/18 (FB)

Major congratulations to Janet Geer (our Surface Water Supervisor), Transect Films, and Puget Sound Starts Here! They worked together to create a series of Drain Rangers short videos and recently won an award for best Science, Technology, Engineering, Arts, and Math (STEAM) video at the New Media Film Festival! Drain Rangers is part of a regional youth education program that provides stormwater curriculum to grades K-12. See the award-winning video at <http://bit.ly/2L8oO8O>, then check out the other three videos in the series. #DrainRangers #PugetSoundStartsHere



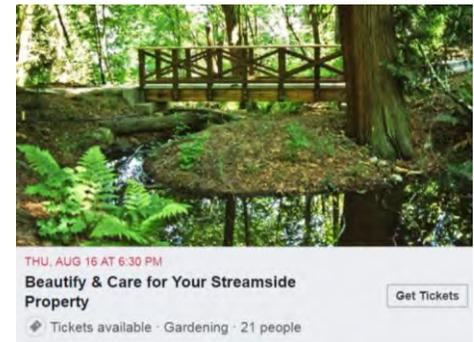
7/15/18 (FB)

There's still time to mulch your trees and shrubs! Just spread 2-3" of wood chips or bark mulch on shrub beds to conserve water, smother weeds, and feed plants. Learn about mulch at <http://bit.ly/2m6e7p7>. #NaturalYardCare #MulchyMulchyMulch



7/16/18 (FB)

Do you live near a stream? King Conservation District's experts are offering a free workshop to teach you about controlling weeds, using native plants, reducing pollution runoff, and much more! Join us at Lytle House Aug. 16 from 6:30 to 8:30 p.m. Register at <http://bit.ly/2uHuGM2> #NativePlants #BothellStreams



Shared KCD's streamside restoration workshop event.

7/17/18 (FB/Twitter)

If you try to convince us this is the emoji for chocolate ice cream, sorry...we're not buying it. Have fun celebrating #WorldEmojiDay today! [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop) #WeScoop 🍌



And if **YOUR** dog made me, **YOU** clean me up.

7/18/18 (FB)

Water early in the morning to reduce evaporation. Let the soil surface dry before watering again so the roots can breathe. Learn about smart watering at <http://bit.ly/2HUQGZN>. #SaveWater #SavePlants



7/19/18 (FB)

We're lucky to have a stretch of dry weather, but it's still important to report spills so they don't travel to our storm drains. When pollutants enter storm drains, they travel to our streams and do harm to the water and everything that lives in it. Always report spills right away to 425-806-6750.

[www.bothellwa.gov/spills](http://www.bothellwa.gov/spills) #SpillHotline



7/20/18 (FB)

How do you usually wash your vehicle? We still have a few free commercial car wash tickets left for City of Bothell residents if you take a short survey about car washing. Learn more about car washing at

[www.bothellwa.gov/carwashing](http://www.bothellwa.gov/carwashing), then take the survey at <http://bit.ly/2JXxwXF>. #WashResponsibly #OnlyRainDownTheDrain



7/21/18 (FB)

Watch your watering systems in action every few weeks to find and fix any leaks. Learn more about watering systems at <http://bit.ly/2JcLFuC>.

#SaveWater #SaveMoney



7/23/18 (FB)

Stop by the #BothellCool table at Music in the Park this Friday! Chat with Emily about sustainability, and if you have a dog, why not take the Super Scooper Pledge? You'll get a free pet waste bag dispenser with leash clip and a "We Scoop" sticker for your garbage can. #WeScoop#MusicInThePark



7/24/18 (FB)

You can save loads of water and money by letting lawn areas go dormant until fall. Grass is super resilient and will come back to life on its own. If brown gets you down, keep the most visible areas of your lawn green. See two minutes of smart watering tips at <http://bit.ly/2uimwcv>. #SaveWater #NaturalYardCare



7/27/18 (FB)

The soil is warm, which means it's a good time to mulch your flower and vegetable gardens. Use an inch of compost to save water, feed your plants, and knock out the weeds. Learn more about mulch at <http://bit.ly/2m6e7p7>. #NaturalYardCare #SaveWater



7/28/18 (FB)

Has your floor seen better days? If you're planning on doing any carpet steam cleaning this summer, please be sure the dirty wash water stays out of any storm drains. Try pouring it down your indoor drains in small batches so it ends up at a wastewater treatment facility instead of in our streams. If you're hiring a professional, make sure they also dispose of the wash water properly. Learn more about eco-friendly home maintenance at <http://bit.ly/2Oa8S4m>. #ItWasTotallyTheCat #OnlyRainDownTheDrain



7/30/18 (FB)

It's only mid summer, but it's not too early to start planting for fall and winter! Plant yummy vegetables like carrots, lettuce, kale, beets, and broccoli so they're ready to eat when the weather turns cool. Learn more about growing food at <http://bit.ly/2KVjc1s>. #CrunchCarrots #EatYourVeggies



8/1/18 (FB)

Slugs and snails got you down? Here are some tips to manage them naturally. Use pesticides only as a last resort, and if you go that route at least pick a safer product for people, pollinators and the environment by using the product rankings at <http://bit.ly/2msZf48>. #TakeBackYourGarden #NaturalYardCare



8/2/18 (FB)

Keep compost working for you. Add yard trimmings to compost piles and check to make sure they stay moist. Mix and moisten dry materials, then cover with plastic or soil to keep it all damp. Find tips about composting at <http://bit.ly/2u5WKJk>. #NaturalYardCare #ReuseIt



8/5/18 (FB)

Let your soil and plants guide how much and how often you water. The soil surface should be dry an inch or so deep before you water. After watering, make sure the water has reached roots several inches deep. Some of your plants may survive with little or no water this summer, so don't water them unless they look stressed. <http://bit.ly/2uiXeey> #SaveWater #StopDrowningMe



8/7/18 (FB)

This isn't exactly the natural beauty you look for when you come to the beach. Let's try to keep Puget Sound's beaches and waters clean! #pugetsoundstartshere



8/8/18 (FB)

Keep your mower blades sharp! Sharp blades keep the lawn greener and help prevent disease. By the way, have you thought about trying a mulching mower? Check out the benefits at <http://bit.ly/2ujH30f>. #MowLikeANinja #WatchYourFingers



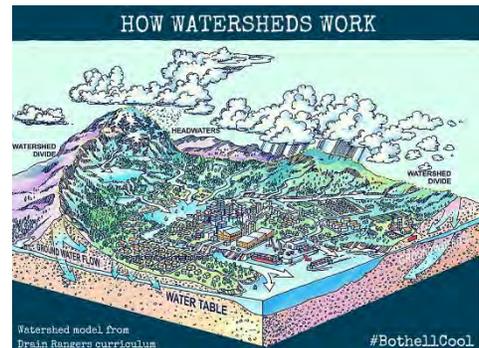
8/11/18 (FB)

We've heard "two out of three ain't bad," but not in this case. Scoop it, bag it, and put in in the trash...every time! Keep Bothell's kids, adults, pets, wildlife, and streams healthy. Learn more about how pet waste harms us at [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop). #WeScoop #ResponsibleDogOwners



8/13/18 (FB)

Quiz time: What's a watershed, how do they work, and do you live in one? Find out the answers at [www.bothellwa.gov/watersheds](http://www.bothellwa.gov/watersheds). #WeAllLiveDownstream



8/14/18 (FB/Twitter)

Alright...who's ready to talk a little %!#\$ and have some fun? Stop by our Surface Water booth at Sustainamania this Saturday to play the Poop Toss Game, take the Super Scooper Pledge, and learn why it's important to pick up after your pooch! Sustainamania details at [www.bothellwa.gov/sustainamania](http://www.bothellwa.gov/sustainamania) #WeScoop #Sustainamania



8/15/18 (FB)

Do you live near a stream? Join us at Lytle House on Aug. 16 for a free workshop! King Conservation District will teach you how to beautify and care for your streamside property. Register at <http://bit.ly/2w46Hr2>. #HealthyStreams #KingConservationDistrict



**FREE WORKSHOP**  
Aug. 16 | 6:30 - 8:30 p.m. | Lytle House

**BEAUTIFY & CARE FOR YOUR STREAMSIDE PROPERTY**  
Brought to you by King Conservation District & City of Bothell Surface Water

8/16/18 (FB)

Hope to see some of you at tonight's free workshop presented by King Conservation District! #HealthyStreams



THU, AUG 16  
**Beautify & Care for Your Streamside Property**  
Lytle House  
Going  
You like King Conservation District

8/16/18 (FB)

King Conservation District is at Lytle House right now talking to Bothell residents about how to care for land near streams and wetlands. Lots of helpful info in this room tonight! #HealthyStreams #HealthyLands#WeHaveCookies



8/17/18 (FB)

With this dry weather, it's easy to see if your vehicle leaves any spots in your driveway or parking space. If you have a leak, you can learn what to do about it before it becomes a big (and expensive) problem. #PugetSoundStartsHere #FixThatLeak



**Don't Drip & Drive**  
**Fix That Leak!**

SAT, AUG 25  
**Free Auto Leaks Workshop!**  
6000 16th Ave SW, Seattle, WA 98106-1401, United...  
Interested  
You like Puget Sound Starts Here

8/18/18 (FB)

We're at Sustainamania at City Hall until 2 p.m. Come by to toss some poop at Christi's Surface Water booth! #PugetSoundStartsHere #Sustainamania



8/25/18 (FB)

If you're down at the UTSAV MELA celebration at the Park at Bothell Landing today, please remember that the ducks do just fine without human food.

[www.bothellwa.gov/ducks](http://www.bothellwa.gov/ducks) #NaturalWaddlers

**Please don't feed us**  
 ...unless you're giving us some tasty worms, roots, beetles, dragonflies, plants, crustaceans, or moths.

Feeding us the same stuff you like to eat does more harm than good. Here's what happens when we eat your food, especially bread:

- It's not nutritious for us.
- It causes overcrowding.
- It attracts pests.
- It spreads disease.
- It pollutes our water.
- It's unhealthy for our ducklings.
- It changes our natural behavior.
- It delays our migration.
- It destroys our habitat.
- It can make those geese even more territorial!

**We waddle enough on our own, thanks.**

**City of Bothell**  
[www.bothellwa.gov/ducks](http://www.bothellwa.gov/ducks)

8/26/18 (FB)

It's not just a day for the dogs, it's also a day to say "thanks" to all their humans for picking up after them. Thanks for doing your part, scoopers! [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop) #DogAppreciationDay #WeScoop



8/29/18 (FB)

Thanks to [Snohomish Conservation District](#), their awesome crew of veterans, Americorps members from the [Washington Conservation Corps](#), and some willing Bothell homeowners...our community's rain garden population is growing! Here's an article about how they're working together to "beautify the neighborhood, prevent flooding and fight pollution."

<http://bit.ly/2BWeJlz> #RainGardens #GreenInfrastructure



BOTHELL-REPORTER.COM  
**Bothell neighbors 'conserve' their community with rain gardens | Bothell-Kenmore Reporter**

Link to Bothell-Kenmore Reporter article

## 8/30/18 (FB)

Have you seen this slightly unappetizing Puget Sound Starts Here commercial? We had a blast brainstorming ideas for a series of stormwater pollution prevention commercials with all of our Puget Sound Starts Here partners and Comcast. We love how this one turned out - what do you think? #PugetSoundStartsHere #NoCheesePlease

Link to Vehicle Leaks/Certain Things Don't Mix PSSH 30-second commercial



## 8/31/18 (FB)

Attention 10th and 11th grade students! Lake Washington Watershed Internship Program is offering an incredible internship for you to become a steward of your local community through mentoring, hands-on learning, habitat restoration and stream monitoring. This year-long internship is based out of the UW Bothell campus and starts Oct. 4. Learn more, see the time commitment involved, and apply online by Sept. 19 at <http://bit.ly/2wyiVlJ>.



## 8/31/18 (FB)

Fall planting season is right around the corner. Stock up at the 21 Acres and Eastside Audubon Society Native Plant Sale! #NorthwestPlants #GoNative #NaturalYardCare



## 9/1/18 (FB)

It's September! With the kids heading back to school, we know your weekends feel even more valuable. Here's a free family-friendly event to add to the calendar that will definitely be worth your time. Head to McCollum Park for the RainScaping Expo, noon to 4 p.m. on Sept. 29. You'll find guest speaker Ciscoe Morris, along with workshops on rainscaping solutions, displays, booths, and prizes. Visit <http://bit.ly/2omceFR> for more info and the event schedule. #RainScaping #SnohomishCounty #ItsEasyBeingGreen



9/3/18 (FB)

It's the end of hot dog season, the beginning of football season, and the fashion police might ticket you for wearing white. That could only mean one thing – it's Labor Day! Enjoy celebrating, and go ahead and wear something white tomorrow. We won't judge...we like to live life on the edge, too. #YOLO #Sustainability4Life



9/4/18 (FB)

Happy Back-To-School Week! If your PTA is looking for an eco-friendly fundraising idea, why not sell commercial car wash tickets? You can get them for \$1.50 each until Sept. 15 at <http://charitycarwash.org/>. Raise funds for schools AND protect Puget Sound at the same time?! Sounds like a win-win to us. #OnlyRainDownTheDrain #BackToSchool #Fundraisers



9/5/18 (FB)

For many Bothell families, today is the first day of a new school year! We want to give a shout-out to all the kids who represent the essence of BothellCool-ness wherever they are...at home, at play, and at school. Being an example and sharing what you know about sustainability with your friends is one of the best ways to encourage eco-friendly habits. Keep being amazing, and welcome back to school!

[www.bothellwa.gov/bothellcool](http://www.bothellwa.gov/bothellcool) #BothellCoolKids #TheMoreYouKnow #TellAFriend



9/6/18 (FB)

"In many cities, it's now even explicitly illegal not to carry a bag, scoop or other means of collecting your pet's poop when out-and-about." Yeah, we're talking dog poop. And Bothell is one of those cities that doesn't mess around when it comes to pet waste! Read this article for the full scoop. #WeScoop#SuperScoopers

Link to The Herald's article: "We've got the scoop on 63 tons per day of poop." <https://www.heraldnet.com/news/weve-got-the-scoop-on-poop/>



9/7/18 (FB)

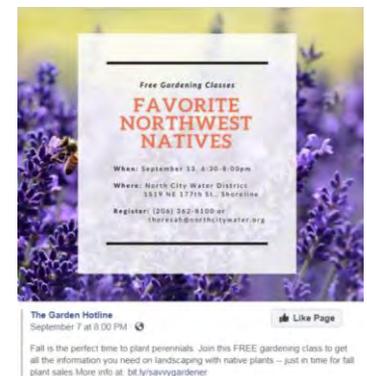
Did you get your copy of the Bothell Bridge yet? Check out pages 16-19 for BothellCool's info about recycling, the Wastemobile schedule, water conservation, natural yard care workshops, Salmon "SEEsion," Pollution Prevention Week, and more. See it all at <http://bit.ly/2wSbo8q>. #BothellBridge #TheMoreYouKnow



9/10/18 (FB)

Free gardening class this Thursday in Shoreline! #NorthwestNatives#NaturalYardCare

Shared The Garden Hotline's post/link: <https://www.savingwater.org/lawn-garden/gardening-classes/>



9/11/18 (FB)

Good news - the Back to School Sale for car wash tickets has been extended until Sept. 22! You can buy commercial car wash tickets for just \$1.50 each, then resell them as part of your school's fundraiser. Get details at <http://charitycarwash.org/>. #PugetSoundStartsHere

Shared original BothellCool post from 9/4/18.



9/11/18 (FB)

Does the so-called relaxing hobby of gardening turn into more of an all-out war in reality...you against your yard? You just might need a little Natural Yard Care in your life! Sign up for one of our free October workshops at [www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc). #NaturalYardCare#NoMoreFighting

Link to NYC Workshop – video #1: <https://youtu.be/2NIQDai-tGQ>

9/12/18 (FB)

Chinook, Sockeye, and Coho – oh my! Salmon SEEsion is here, and King County put together a map of salmon "hot spots" to check out, including North Creek. Will you be lucky enough to see one? Get info about their whereabouts at <http://bit.ly/2wuXY1R>. #SalmonSeesion #LocalSalmon #SpotTheSpawners



9/12/18 (FB)

Make way for salmon! Here's another opportunity to look for salmon in North Creek...and do some good for the environment at the same time. Win-win! Check out more opportunities to look for salmon at [www.bothellwa.gov/salmonontours](http://www.bothellwa.gov/salmonontours) #SalmonSEEsion

Shared Friends of North Creek Forest's event



9/14/18 (FB)

2, 4, 6, 8...now we must dechlorinate! If you have a pool and are ready to put the cover back on for the next few seasons, be sure to dechlorinate it before draining the water. Allowing chlorinated water go down a City of Bothell storm drain isn't just bad for our streams and fish, it's against the law. Learn more at <http://bit.ly/2BNqr88>. #Dechlorinate #PollutionPreventionWeek #UntilNextSummer



9/14/18 (FB/Twitter)

Join Orlay Johnson, retired NOAA research fisheries biologist, for a free tour to look for and learn about spawning salmon in North Creek! He's offering tours at 10 a.m. on Sept. 23 and Oct. 14. Learn more and sign up at [www.bothellwa.gov/salmonontours](http://www.bothellwa.gov/salmonontours). #SalmonSEEsion #SalmonSays



9/15/18 (FB/Twitter)

Free natural yard care workshops are coming this October! Have you signed up? [www.bothellwa.gov/nycworkshop](http://www.bothellwa.gov/nycworkshop) #NaturalYardCare #ILikeMePesticideFree



## 9/16/18 (FB/Twitter)

Attention 10th and 11th grade students! This Wednesday is the deadline for turning in your application for the Lake Washington Watershed Internship Program! Become a steward of your local community through mentoring, hands-on learning, habitat restoration and stream monitoring. This year-long internship is based out of the UW Bothell campus and starts Oct. 4. Learn more, see the time commitment involved, and apply at <http://bit.ly/2wviVIJ>.



## 9/17/18 (FB/Twitter)

It's Pollution Prevention Week, and we're challenging you to stop pollution at its source. Not sure how to do that? Check out some ideas at [www.bothellwa.gov/p2week](http://www.bothellwa.gov/p2week) and follow #BothellCool all week for daily pollution prevention tips. #GiveAHoot #P2Week #PollutionPreventionWeek #BothellCool #PugetSoundStartsHere



## 9/17/18 (FB)

Here are some fun facts to make today seem a little less Monday-ish. By the way, Natural Yard Care workshops are coming to Bothell next month. Have you signed up yet? [www.bothellwa.gov/nycworkshop](http://www.bothellwa.gov/nycworkshop). #GoodBugs #NaturalYardCare #LadybugLove

Link to Fun Facts about Ladybugs video: <https://youtu.be/4oXmK-QYpL4>

## 9/18/18 (FB/Twitter)

All week long, check out #BothellCool for tips on ways you can prevent pollution. Today's tip? Check your vehicle for leaks. Get a free leak inspection and learn how to look for and identify leaks on your own at [www.fixcarleaks.org](http://www.fixcarleaks.org) #P2Week #BothellCool #PugetSoundStartsHere #OnlyRainDownTheDrain



## 9/18/18 (FB)

Want to stay in the loop about Surface Water workshops, volunteer events, and other opportunities to get involved? Check out our most recent quarterly e-newsletter at <http://bit.ly/2D7fyPr>. Then sign yourself up for "Surface Water News & Volunteer Opportunities" to have e-news delivered right to your email inbox or phone next time at <http://www.bothellwa.gov/list.aspx>. #PugetSoundStartsHere #OnlyRainDownTheDrain



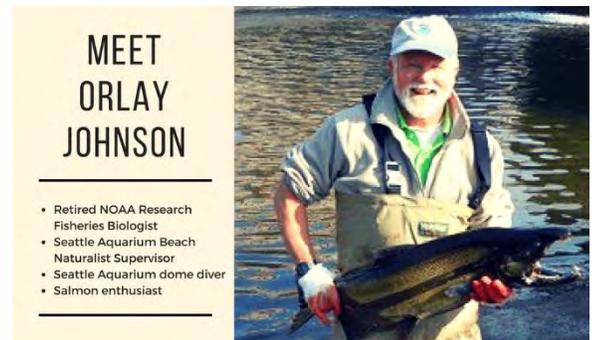
## 9/19/18 (FB/Twitter)

Today's pollution prevention tip is brought to you by Fido! Picking up after your pet isn't just the law, it's the healthy thing to do. Leaving dog poop in your backyard allows you, your kids, and your pets to track it indoors, inviting a whole army of nasty bacteria into your house. And back-to-school month already comes with enough germs of its own. Get the scoop at [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop). #P2Week #BothellCool #PugetSoundStartsHere #OnlyRainDownTheDrain



## 9/19/18 (FB)

Have you signed up for the Oct. 14 tour of North Creek to look for and learn about salmon? Local salmon expert Orlay Johnson is excited lead the tour and share his years of knowledge with you! Sign up at [www.bothellwa.gov/salmon tours](http://www.bothellwa.gov/salmon tours) #SalmonSEEs on



## 9/19/18 (FB/Twitter)

Ahoy t' all th' cur owners in Bothell! Yer cur's poop bag may say 'tis compostable or biodegradable, but th' poop itself ain't. Always throw yer cur's poop only in th' garbage aft ye scoop 'n bag it up. Keep yer sprogs, pets, 'n streams healthy! [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop) #TalkLikeAPirateDay



## 9/20/18 (FB/Twitter)

What do grease, coffee grounds, and tampons have in common? They should all stay out of your septic system! Lower your risk of septic failure and pollution by having your system inspected every one to three years, and be kind to your pipes. Learn to be septic smart at [www.bothellwa.gov/septic](http://www.bothellwa.gov/septic). #P2Week #BothellCool #PugetSoundStartsHere #OnlyRainDownTheDrain



## 9/21/18 (FB/Twitter)

Help our Storm and Surface Water teams stop pollution at its source by reporting spills whenever you see them. Call our Spill Hotline 24/7 at 425-806-6750 so we can try to keep pollution out of our storm drains and streams. Report things like vehicle fluids, soapy water, and restaurant grease near storm drains. Learn what else to look for at [www.bothellwa.gov/reportspills](http://www.bothellwa.gov/reportspills). #P2Week #BothellCool #PugetSoundStartsHere #OnlyRainDownTheDrain



## 9/21/18 (FB)

Were you planning to go to the Sept. 23 North Creek tour to look for salmon with Orlay Johnson? If so, we've got some bad news. There aren't any salmon to spot, as they haven't made their way to North Creek yet. So we're canceling the Sept. 23 tour, but encourage you to sign up for the Oct. 14 tour instead at [www.bothellwa.gov/salmontours](http://www.bothellwa.gov/salmontours). #SalmonSEEsOn#HereFishyFishy



## 9/21/18 (FB)

Join your neighbors at a volunteer rain garden planting party on Oct. 11! Many thanks to Snohomish Conservation District, King Conservation District, 12,000 Rain Gardens, and Stewardship Partners for organizing this community event. Not sure what a rain garden is? Learn all about them at [www.bothellwa.gov/raingardens](http://www.bothellwa.gov/raingardens). #RainGarden #BothellCommunity



## 9/22/18 (FB/Twitter)

Not everyone realizes that when you wash your car in the driveway, the soapy water and all the polluted runoff from your car gets washed right into the nearest storm drain, stream, lake or river, and eventually Puget Sound. But there's an eco-friendlier way! Try a commercial car wash instead. Bothell residents can even take a survey for a free commercial car wash ticket. See if you qualify at <http://bit.ly/2JXxwXF>. #P2Week #BothellCool #PugetSoundStartsHere #OnlyRainDownTheDrain



## 9/22/18 (FB)

Happening now until 2 p.m. What a way to celebrate the first day of fall!



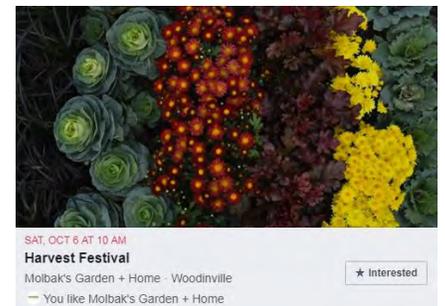
## 9/23/18 (FB/Twitter)

It's the final day of Pollution Prevention Week, but that doesn't mean you can't keep stopping pollution at its source! We'll even show you how. Sign up for one, two, or all three of our free Natural Yard Care workshops happening this October. Read more and register at [www.bothellwa.gov/nycworkshop](http://www.bothellwa.gov/nycworkshop). And thanks for protecting Puget Sound! #P2Week #BothellCool #PugetSoundStartsHere #OnlyRainDownTheDrain



## 9/23/18 (FB)

Family-friendly harvest festival at Molbak's Garden + Home on Oct. 6. Sounds fun! #GetYourPlantsOn



## 9/24/18 (FB/Twitter)

Yes, fall is definitely here. And yes, we are shamelessly jumping on the pumpkin spice bandwagon to promote our Natural Yard Care programs. Sign up for one, two, or all three of our free October workshops at [www.bothellwa.gov/nycworkshop](http://www.bothellwa.gov/nycworkshop). #WhateverWorks #Shameless #PumpkinSpice #NaturalYardCare



9/25/18 (FB/Twitter)

Keep swimming upstream, salmon! We're eager for you to make it to North Creek! [www.bothellwa.gov/salmonseason](http://www.bothellwa.gov/salmonseason).

#NationalComicBookDay #BadNewsBears #SalmonSEEsion



9/26/18 (FB)

"I AM a gardener. I AM a gardener. I AM a gardener." Start practicing this mantra, then come to one of our free Natural Yard Care workshops for some self-affirmation. Sign up at [www.bothellwa.gov/nycworkshop](http://www.bothellwa.gov/nycworkshop). #FindYourInnerPeas #NaturalYardCare

Link to "Moment of Zen" NYC video at <https://youtu.be/gDatUJaqO5c>

9/27/18 (FB)

Today was Bothell's inaugural Safety Rodeo, organized by Bothell's own Safety Committee! Its purpose was to help our coworkers learn to be prepared and safe not just for emergencies, but in our day-to-day lives. Since #BothellCool is all about sustainability, we set up a green cleaning station where our coworkers could each make a bottle of non-toxic household cleaner to take home. We also told them what to look for and what phone number to call if they ever see a spill on a roadway, in a stream, or near a storm drain. (BTW, it's 425-806-6750.) [www.bothellwa.gov/bothellcool](http://www.bothellwa.gov/bothellcool) #SafetyFirst #GreenCleaning #OnlyRainDownTheDrain



9/28/18 (FB/Twitter)

Looking for something to do this weekend? Head to McCollum Park for the RainScaping Expo, noon to 4 p.m. on Sept. 29. It's a free family-friendly event where you can listen to guest speakers talk about rainscaping solutions, visit displays and booths, and win prizes. And gardening guru Ciscoe Morris will be there! Visit <http://bit.ly/2omceFR> for more info and the event schedule. #RainScaping #CiscoeMorris #OhLaLa



## 10/1/18 (FB)

You wouldn't drink & drive, but would you drip & drive? Small leaks from your vehicle can easily become large and expensive leaks if you don't fix them quickly. Visit [www.fixcarleaks.org](http://www.fixcarleaks.org) for a free leak inspection, a list of local mechanics, and upcoming free workshops to help you look for and identify leaks yourself. #FixVehicleLeaks #PugetSoundStartsHere

### VEHICLE LEAKS

#### How to check for leaks

- 1) Park your vehicle in a place where you can safely access its underside.
- 2) Right after you turn off your car (while the engine is still warm), slide a drip sheet under the front of your vehicle beneath the engine. You could also use light-colored cardboard or white butcher paper.
- 3) Leave the drip sheet in place for a few hours. Secure it with rocks or something heavy to keep it in place.
- 4) Remove the drip sheet and check for leaks.
- 5) Use the color chart to help identify the leak. Make note of the color, texture, location, and odor of any leaking fluids.
- 6) Contact your mechanic for further evaluation and repair of any leaks. Visit [www.fixcarleaks.org](http://www.fixcarleaks.org) for a list of local AAA/ASA recommended mechanics.
- 7) Be sure to place cardboard or other container beneath your vehicle to catch any drips until the leaks are repaired.

[www.bothellwa.gov/vehicleleaks](http://www.bothellwa.gov/vehicleleaks)



## 10/2/18 (FB)

Laura from Tilth Alliance is schooling us at our Healthy Lawns and Gardens from the Ground Up natural yard care workshop tonight. Join us next Tuesday to learn about smart plant choices for northwest gardens! [www.bothellwa.gov/nyc](http://www.bothellwa.gov/nyc)



## 10/3/18 (FB)

There's something strange going on in Bothell. The leaves...they're "changing." (Insert dramatically ominous music here.) You can't escape this unstoppable natural phenomenon, but we can at least help you survive it. Learn how at <http://bit.ly/2Nfu1IR>. #KeepStormDrainsClear #PreventFlooding

Link to "Keep Storm Drains Clear" video: <https://youtu.be/O7OXR6y4dE>

## 10/6/18 (FB/Twitter)

Whether you're an IPA, lager, stout, or pilsner lover, have fun today at the #BothellBeerFestival in City Hall's parking garage! But if you're not a fan of what you're tasting, please don't dump it out on the pavement or concrete. It could end up in our storm drains and streams, and many of those fish are still minors. #HealthyStreams #HealthyFish #MmmmmBeer



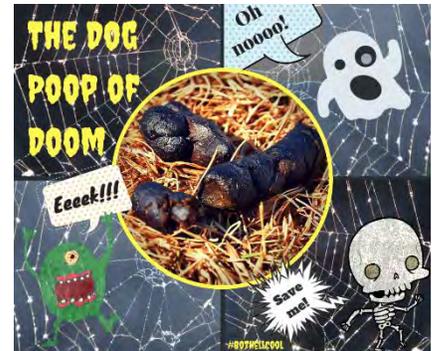
## 10/10/18 (FB)

It's Salmon SEEson – a great time to peer into local creeks to scout for salmon. Come to North Creek for a guided tour on Oct. 14, or head out and try to spot the spawners on your own. Learn more at [www.bothellwa.gov/salmonseeson](http://www.bothellwa.gov/salmonseeson).  
#SalmonSeeson #SpotTheSpawners

Link to "It's Salmon SEEson" video: <https://youtu.be/UCKReICXdM>

## 10/18/18 (FB)

What's scarier than monsters, ghosts, and skeletons? The nasty germs hiding in your pup's poop! Dog poop is full of fecal coliform, a group of bacteria that can make people and pets really sick. That's why scooping pet waste from your own yard is just as important as scooping it when you're out and about. Save the scary stuff for Halloween! More about poop at [www.bothellwa.gov/scoop](http://www.bothellwa.gov/scoop).  
#WeScoop #ThingsThatGoSquishInTheNight



## 10/19/18 (FB)

We've been so spoiled by all this sunshine, but it looks like our good ol' friend Rain is returning next week. If your vehicle has a leak, try to get it fixed before the rain has a chance to wash those leaking auto fluids into storm drains and streams. Not sure if you have a leak? Schedule a free visual inspection with a local mechanic at [www.fixcarleaks.org](http://www.fixcarleaks.org).  
#DontDripAndDrive #PugetSoundStartsHere



## 10/20/2018 (FB)

Big shout-out to the fantastic group of volunteers who came out to Parr Creek this morning to spread mulch around the plants. You guys rock, and we appreciate your service! #ThankYou #SoManyDucks  
#DonutsWithSprinkles #BirthdayBoy



10/22/2018 (FB)

What's a duck's favorite snack? Cheese and quackers! Just kidding...it's more like worms, slugs, grains, and bugs. You're doing ducks a favor by letting them forage for their own food. Learn why at [www.bothellwa.gov/ducks](http://www.bothellwa.gov/ducks). #BreadIsForSandwichesNotDucks

Link to duck foraging for food at Parr Creek video: <https://youtu.be/32g6rIUTR8>

10/29/2018 (FB)

Creepy but cool! Spiders aren't the only helpful critters in your lawn and garden. Learn about a whole bunch of other "good bugs"

at <https://www.growsmartgrowsafe.org/GoodBugGuide>. #NaturalYardCare #NaturalHelpers



10/31/2018

Have a safe and happy Halloween, Bothell! #HowDoIRecycleAllThisChestHair #BothellCool



11/2/2018 (FB)

Dust off your raincoat...our infamous Pacific Northwest rain is back in town! You can help prevent localized flooding by keeping leaves out of the storm drains on your street. So grab a rake and add those leaves to your yard waste bin, turn them into compost, or use them as mulch on your garden beds and landscaped areas. Learn more about flood prevention at <http://www.ci.bothell.wa.us/1448/Flood-Prevention>.

#OnlyRainDownTheDrain #PuddleSplashingTime



11/7/2018 (FB/Twitter)

Fallen leaves can block storm drains and lead to ponding and localized flooding in your neighborhood. You can help prevent this from happening by raking leaves and keeping them out of your street and storm drains.

More tips at <http://www.bothellwa.gov/1448/Flood-Prevention>. #ILikeMeFloodFree #RakeLeaves

Link to leaf raking video: <https://youtu.be/OJOUaCeuzV0>

11/9/2018 (FB/Twitter)

All these colorful leaves sure are beautiful, but when mixed with heavy rain, they can wreak havoc on your property if you ignore them. Now is a good time to clear out your gutters and downspouts if you haven't already. Learn what to do with all your leaves at <http://www.bothellwa.gov/1448/Flood-Prevention> #KeepStormDrainsClear #ILikeMeFloodFree



11/10/2018 (FB)

If you're an avid gardener or if you came to one of our Natural Yard Care workshops last month, you probably know something about bareroot plants. Good news - King Conservation District is having their native bareroot plant sale right now! Order your plants online now and pick them up on March 16 just in time for spring planting. <http://bit.ly/2DbImVe> #NaturalYardCare #BarerootNativePlants



11/11/2018 (FB/Twitter)

Thank you for your service, Veterans! #VeteransDay #MilitaryFamilies



11/13/2018 (FB/Twitter)

Before you and your pup head out the door, don't forget the essentials! <http://www.bothellwa.gov/567/Pet-Waste> #WeScoop #PickUpAfterYourDog

Link to Who's Ready to Go for a Walk video: <https://youtu.be/QD2HhOmmBlk>

11/14/2018 (FB/Twitter)

In May, @BothellCool participated in the interactive Survive the Sound steelhead tracking game. Our fish, Sammy, didn't fare so well. But during that migration and every day since, Long Live the Kings has been working hard to drive salmon and steelhead recovery efforts, which means a more hopeful future for our resident orcas. Read their annual report to learn how they are helping and how you can get involved at <http://bit.ly/2B624jR>. #SaveOurSalmon #SaveOurOrcas #RIPSammy



11/15/2018 (FB)

Guess what everyone in this group has in common? They all want to teach you how to make our creeks, lakes, rivers, and Puget Sound cleaner! Today we're at our annual STORM (Stormwater Outreach for Regional Municipalities) meeting, and we're excited to help you learn what YOU can do to improve local water quality. Learn more at [www.bothellwa.gov/pssh](http://www.bothellwa.gov/pssh). #PSSH #HealthyStreams



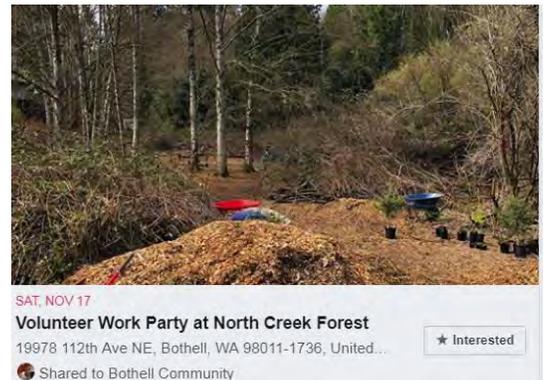
11/16/2018 (FB/Twitter)

Are you on septic? Got family coming into town soon? It's a good idea to make sure your septic system is in good working order before your guests arrive. Added flushes, showers, laundry, and cooking put more pressure on your system. Don't let septic problems spoil your holiday cheer! Learn how to be septic smart at <http://www.bothellwa.gov/578/Septic-Systems> #SepticSmart #NoWipesDownThePipes



11/16/2018 (FB)

Join Friends of North Creek Forest tomorrow (Saturday) to help get rid of invasive species to make room for beneficial native plants. Hosts will provide gloves, tools, motivation, and snacks! #communitystewardship#northcreekforest



11/20/2018 (FB)

What a fantastic idea for a children's book, if we do say so ourselves! In all seriousness though, hats off to our Storm Operations crew for running Bothell's street sweepers seven days a week to help keep leaves off of streets and out of storm drains. Clogged drains can lead to flooding. You can help protect your property by raking leaves away from the storm drains in your neighborhood. Need ideas about what to do all those leaves? Check out a few tips at <http://bit.ly/2Dxurco> #BothellStormOpsRocks



11/21/2018 (FB)

If you're feasting tomorrow and sharing table scraps with your dog, remember which foods are off limits for your four-legged friend: Chocolate, caffeine, grapes, nuts, citrus, onions, garlic, raisins, coconuts, raw meat/eggs/bones, and alcohol. (Save that last one for Aunt Marlene if you want to stay on her good side.) Learn more ways to keep your pup safe during the holidays at <http://bit.ly/2Q8q91K> #TurkeyForMe #TurkeyForYou #LetsEatTheTurkeyInMyBigBrownShoe



11/22/2018 (FB/Twitter)

Want to know one thing we're especially thankful for? Your incredible community spirit! Happy Thanksgiving, Bothell and beyond! #thanksgiving#bothellcommunity #bothellcool



11/24/2018 (FB/Twitter)

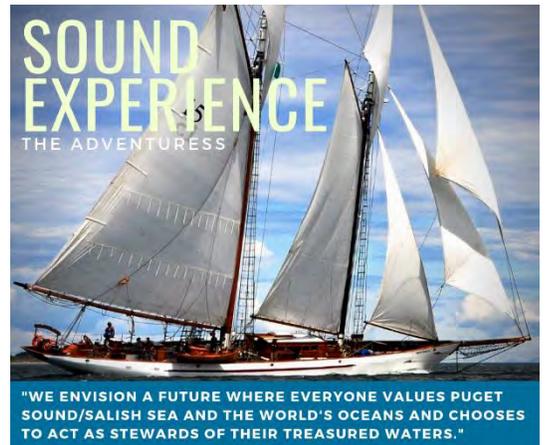
Spills that could make their way into storm drains, creeks, streams, and rivers, are definitely a big deal! Pollutants that enter storm drains and ditches will travel – untreated – to the nearest body of water. Let us know about stormwater pollution in Bothell right away by calling 425-806-6750, day or night. #OnlyRainDownTheDrain #HealthyStreams



11/28/2018 (FB)

Looking for an unforgettable adventure while learning to take better care of the Salish Sea? Sound Experience aboard the Schooner Adventuress is now accepting applications for the 2019 sailing season for paid positions, internships, and volunteers. Sail aboard The Adventuress, a century-old National Historic Landmark tall ship. Why? To foster environmental sustainability, youth development, and maritime careers through powerful shipboard programs on the waters of the Salish Sea. Learn more and apply at <https://www.soundexperience.org>  
#AllAboard #MaritimeJobs

Photo: E.T. Becker



12/4/2018 (FB)

Pre-orders are now open for Snohomish Conservation District's Annual Plant Sale! Order today, pick up your plants on Feb. 9. #GreatDeals #NativePlants



12/6/2018 (FB)

Hey teachers! Please don't call us out for passing notes in class - this is a good one. You can sign up to have Nature Vision give a free presentation to your students about stormwater, salmon, water conservation, wetlands, watersheds, healthy soils...you decide! Learn more and sign up for winter and spring programs at <https://naturevision.org/school-programs/>. #StormwaterEducation #PugetSoundStartsHere



12/11/2018 (FB)

If you missed our natural yard care workshops in October, we want to hear from you! Take a few minutes to share some info about how you care for your lawn and garden, and be entered to win a really cool prize! Take the survey at <https://bit.ly/yardcaresurvey>.



HAVE A FEW MINUTES?

### TAKE A SURVEY ABOUT LAWN AND GARDEN CARE

Enter to win an awesome gardening book about Pacific Northwest plants and landscape designs!

**SURVEY DEADLINE: DEC. 31**

<https://bit.ly/yardcaresurvey>

12/13/18 (FB)

Thinking about making some changes to your landscape next year? Join Snohomish Conservation District and King County Wastewater Treatment Division to learn about effective yard design. Bring photos or a map of your yard to get specific advice from the experts. #SustainableLandscapes#NaturalYardCare



SAT. JAN 12, 2019 AT 10 AM

### Jumpstart Your Yard: Tips for designing a sustainable landscape

★ Interested

You like Snohomish Conservation District

12/14/18 (FB)

The more you know...

Stormwater is a part of life. But polluted stormwater doesn't have to be. Learn what role you can play in protecting local water quality at <http://www.ci.bothell.wa.us/474/Preventing-Stormwater-Pollution> #PugetSoundStartsHere

WORD OF THE DAY:

## STORMWATER

WHAT IS IT?

It's the water from rain and snow that runs off surfaces like rooftops, driveways, paved streets, highways, and parking lots instead of soaking into the ground or evaporating.

Stormwater picks up whatever it touches, like oil from the road, yard chemicals, and pet waste. This polluted water then runs off into ditches and storm drains. From there, it flows untreated into our creeks, lakes, rivers, and Puget Sound.



12/17/18 (FB)

This might be the only time of year English holly doesn't get a bad rap. So if you've got a little (or a lot) in your yard, go ahead and take advantage of its festive look, but never eat the berries. And when the holidays are over, make a resolution to tackle any unwanted English holly that's been slowly taking over your yard. Learn how at <http://bit.ly/2rFwwf5>. #NotSoJollyHolly #NaturalYardCare

Photo: Sasha Shaw



December's Weed of the Month

### ENGLISH HOLLY

Why it's a problem

- In forests, it forms dense thickets that dominate the tall shrub layer
- It suppresses germination and growth of native tree and shrub species
- It easily becomes invasive
- Its berries are poisonous to humans and pets

How it spreads

- Bees serve as pollinators
- Birds disperse the berries
- Through suckering and layering

#BOTHELLCOOL

## 12 Days of Sustainability Posts (split content with recycling/sustainability posts)

12/26/18 (FB)

Drip...drip...drip. No, it's not the faucet this time. Vehicles can leak, too. Don't let yours turn into an expensive repair job! Fix car leaks right away, save money, and keep pollutants out of storm drains and streams. It's a win-win-win situation. Learn more at [www.fixcarleaks.org](http://www.fixcarleaks.org).

#12DaysOfSustainability



12/29/18 (FB)

What's a rain garden, you ask? It's a bowl-shaped shallow planted area in the landscape where rain water collects and absorbs back into the soil. It mimics the natural environment of the undisturbed soils and forests that once covered the Puget Sound area. Rain gardens are designed to slow, filter, and infiltrate runoff from roofs or pavement to help protect local water quality. It uses spongy living soils and native plants to achieve its goal. Learn more about rain gardens at <http://www.ci.bothell.wa.us/571/Rain-Gardens>.

#12DaysOfSustainability



12/30/18 (FB)

If you're washing your vehicle on a hard surface like your driveway, all the soap and vehicle pollutants run off into the nearest storm drain. From there, that polluted water ends up in our streams, lakes, and rivers. Want to try an eco-friendlier way? Bothell residents can take a survey and earn a free car washing ticket at <http://bit.ly/2JXxwXF>.

#12DaysOfSustainability #OnlyRainDownTheDrain



12/30/18 (FB)

Here's a good article that helps explain urban stormwater and how it affects salmon.

Link to Encyclopedia of Puget Sound article "What is killing the coho?"

<https://www.eopugetsound.org/magazine/is/stormwater-mystery>



EOPUGETSOUND.ORG

**What is killing the coho? | Encyclopedia of Puget Sound**

Salish Sea Currents is an online magazine from the creators of the...

From 1/1/18 to 12/31/18, BothellCool's Facebook page "likes" increased from 752 to 1006. This represents a 34% increase in followers over a 12-month period.

Total Page Likes as of Today: 1,006

