



# 2021 ANNUAL REPORT SURFACE WATER UTILITY

**THE CITY OF SHORELINE** Surface Water Utility manages rainwater runoff to help prevent flooding and to reduce pollution in our streams, lakes, and Puget Sound. When it rains, rainwater flows from buildings and homes into the roads, and then into a system of drains, pipes, and ditches. This system is called the “stormwater system.” The stormwater system helps prevent flooding in our neighborhoods by sending rainwater runoff to the nearest stream, lake, or straight into Puget Sound.

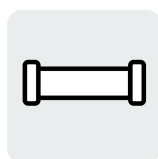
As rainwater runoff flows through the City, it pick ups any pollution it touches, like car leaks, garden chemicals, and dog waste. This pollutes the rainwater. This polluted rainwater flows into the stormwater system and straight into our waterways.

**Each year, we work hard to prevent flooding and water pollution by:**

- inspecting, cleaning, and repairing the stormwater system to ensure it is functioning;
- constructing new facilities to address drainage and pollution issues and manage rainwater runoff; and
- promoting community activities that create cleaner and healthier streams, lakes, and Puget Sound

This report shares the work we accomplished in 2021 and provides updates on our 2022 budget, rates, and projects. It also provides ways that you can get involved to help us protect clean water habitat in our streams, lakes, and Puget Sound. To learn more, please visit our website at: [shorelinewa.gov/surfacewater](http://shorelinewa.gov/surfacewater)

## Shoreline’s Stormwater System



**139.5**  
Miles of  
Stormwater



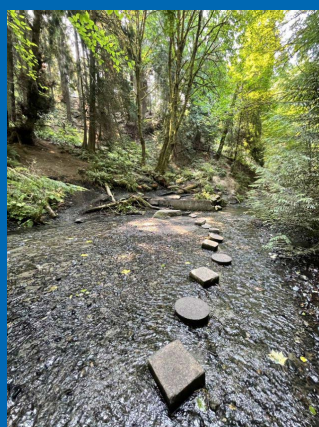
**7,757**  
Storm  
Drains



**17**  
Stormwater  
Ponds



**48,902**  
Square Feet of  
Rain Gardens



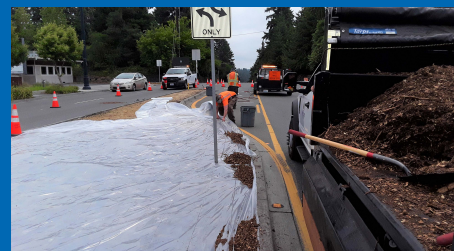
## How Can the City Better Protect and Restore Shoreline’s Streams, Lakes, and Creeks?

We want to hear your ideas and opinions, and understand what matters most to you!

Visit [bit.ly/ShorelineSMAP](http://bit.ly/ShorelineSMAP) for an interactive map of our waterways and information on pressures they face. After reading through the interactive maps, we invite you to participate in a survey to share your ideas and priorities. We will use this feedback to help prioritize and plan future Surface Water Utility projects and programs.

## City Implements Integrated Pest Management Policy

Integrated Pest Management (IPM) is an effective, environmentally-sensitive, long-term approach to manage pests. The IPM Policy will help protect Shoreline’s waterways by reducing pesticides near surface waters. It will also protect human health and endangered species. The policy applies to work taking place on City-owned properties and in the right of way. IPM uses chemical controls as a last resort and uses other methods, like physical or biological controls first.



**PHOTO:** City crew lays plastic over median to kill weeds; this physical control is called solarization.



# SURFACE WATER UTILITY

## Managing Stormwater Impacts

Our work helps reduce negative impacts from flooding and pollution. Annual inspection and maintenance programs, such as storm drain cleaning and pipe repair, ensure our system is functioning. Street sweeping helps pick up car pollutants, including zinc and copper dust, and 6ppd-quinone. These pollutants are harmful to salmon and other aquatic wildlife.



To reduce flooding at Linden AVE N and N 155th Street, updates to the stormwater system were constructed. A small project installed an asphalt-lined ditch, a new catch basin, and created a new connection point to the larger stormwater system. This work increased drainage capacity and allowed runoff to better drain by working with the natural slope of the road.



**1,617**

**Maintenance Work Orders** completed.

**86%**

completed as scheduled



**469**

**Tons of Debris** removed by street sweeping.

**\$112.24**

per lane mile swept



**8.54**

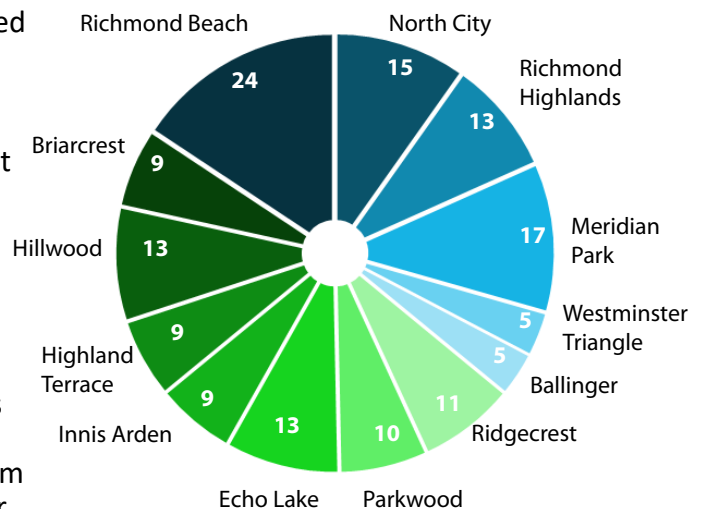
**Miles of Stormwater Pipe** inspected by video to identify pipes needing cleaning, repair, or replacement.

## Providing Consistent & Equitable Service

We are committed to providing consistent, equitable service to Shoreline residents at a reasonable cost and within budget. Each year, the Utility responds to residents' service requests related to drainage and flooding issues. In 2021, the City received 155 service requests, of which 99% were responded to. The adjacent chart shows the number of service requests addressed by neighborhood.

We repair and improve our stormwater system using input from residents. Project locations are also chosen based on an analysis of the stormwater system in each area of the city. This year, 52 small repairs were completed around the City.

**99% of Service Requests Responded to Throughout City**



Older stormwater pipes can become damaged and cause serious problems, such as flooding or sinkholes. We inspect miles of pipes each year to identify sections of pipe that need repair. The most badly damaged pipes are removed and replaced with new pipe. In 2021, we replaced 658 feet of pipe across 22 sites.

# 2021 ANNUAL REPORT

## Engaging the Community

When it comes to protecting our streams, lakes, and Puget Sound, engaged residents and businesses are essential partners. We offer community programs that help protect our waters, including Adopt-a-Drain, Lake Stewardship, and Soak It Up. You can find pollution prevention tips and resources shared on the Shoreline City Hall Facebook and Instagram pages, in the Currents Newsletter, and at [shorelinewa.gov/cleanwater](https://shorelinewa.gov/cleanwater)



66

**Storm Drains Adopted** to help prevent neighborhood flooding and water pollution.

Join us!  
[shorelinewa.gov/adopt-a-drain](https://shorelinewa.gov/adopt-a-drain)



46

**Outreach Messages** published in print, web and social media.

**90%** of households reached



52

**Volunteers Engaged** in Surface Water Utility Volunteer programs.

**13%** increase in volunteers compared to 2020



**Overuse of garden chemicals pollutes our streams, lakes, and Puget Sound**, harming fish and wildlife. They're not healthy for children or pets either. Switch to a beautiful, low maintenance garden all while using fewer chemicals.

The City hosted two natural yard care workshops this past year. Browse a collection of our natural yard care videos at [shorelinewa.gov/naturallyardcare](https://shorelinewa.gov/naturallyardcare)

## Protecting the Environment

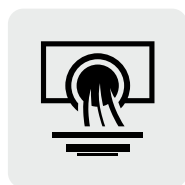
Federal and State laws require the City to manage stormwater impacts. We work hard to protect and improve Shoreline's waters, often going above and beyond the minimum requirements. By inspecting public and private stormwater systems, cleaning up spills, and providing public education opportunities, we protect the health of our natural waterways. Learn more and provide feedback on how the City meets these requirements at [bit.ly/ShorelineStormwaterPlan](https://bit.ly/ShorelineStormwaterPlan)



68

**Private Facilities** inspected for pollution or maintenance issues.

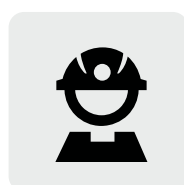
**41%** required corrective maintenance



54

**Spills and Illicit Discharges** reported by the public, City staff, or party responsible for the spill.

**14** calls received from the public reporting spills to City Hall main line: **206-801-2700**



6,122

**City Stormwater Assets** inspected for maintenance or pollution issues.

**99%** within required schedule

**Of the 54 reported spills**, most were cleaned by the party responsible for the spill. City staff were needed to clean the 14 spills listed below. Reporting spills as soon as possible helps us clean spills before they enter storm drains, ditches, and natural waterways.

Spill type	Number in 2021
Vehicle fluids	11
Paint	1
Construction water runoff	1
Silt/Sediment	1

**Report all spills 24/7 to Shoreline City Hall (206) 801-2700**

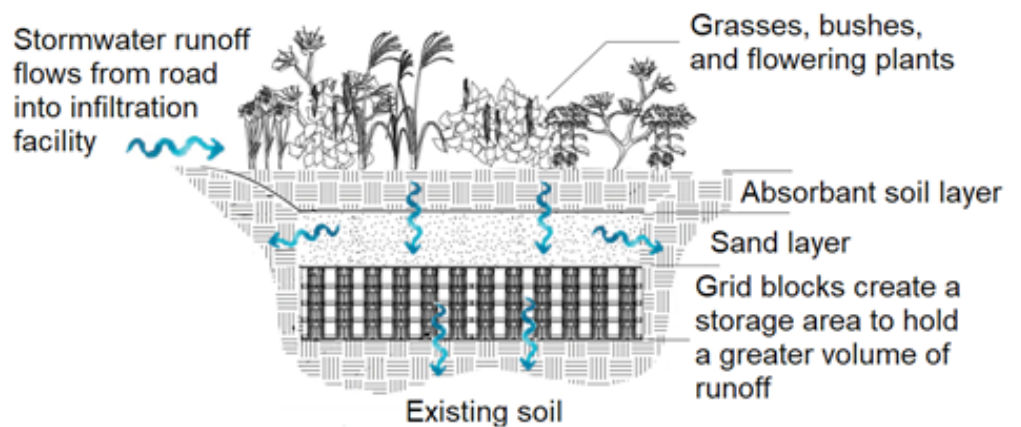


# IMPROVING OUR STORMWATER SYSTEM

Each year, the Utility works with the City's Engineering Division to complete drainage repair and improvement projects around the City. Larger projects are part of the City's Capital Improvement Plan. Detailed information on construction impacts is distributed to affected areas. Information on all current and planned projects is available online at [shorelinewa.gov/projects](http://shorelinewa.gov/projects)

## NE 148th Street Infiltration Facilities Project

Frequent ponding occurs on NE 148th Street between 12th Avenue NE and 15th Avenue NE. New infiltration facilities will capture stormwater runoff and allow it to naturally soak into the soils below. Some facilities will have plantings at the surface, while others will have hard surfaces that allow for parking. Allowing runoff to soak into the ground removes pollutants, unlike traditional piped stormwater systems. This will help protect nearby Little's Creek. This project aims to improve NE 148th Street's drainage problems while also improving the water quality of the creek.



**GRAPHIC** shows how new facilities will capture more stormwater runoff and allow it to infiltrate into the ground.

Construction scheduled for 2022



**PHOTO:** Concept image of rain garden in right-of-way.

## 10th Avenue NE Drainage Improvement Project

Restored ditches and a new overflow pipe system will reduce flooding along 10th Avenue NE between NE 175th Street and NE 165th Street. This project will also install up to nine rain gardens to help reduce pollution in nearby Little's Creek. The new rain gardens will help filter polluted stormwater before it reaches the creek.

Under design in 2022

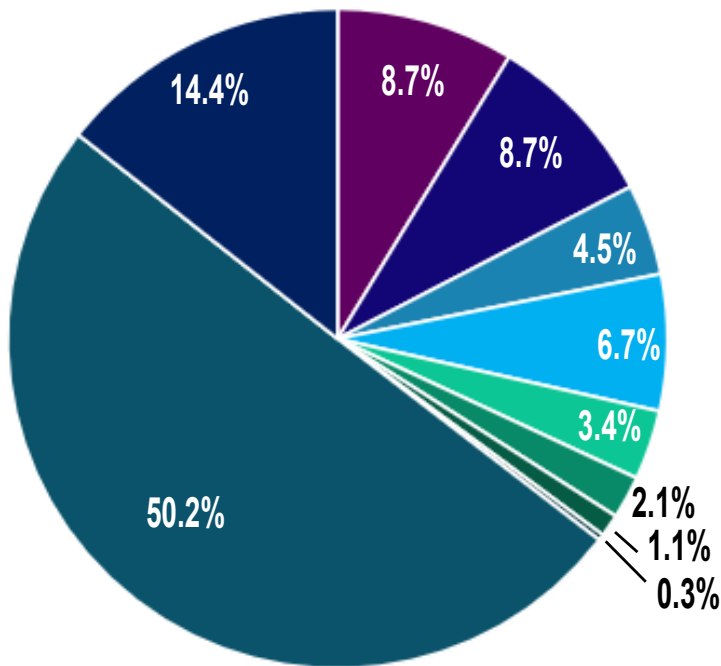
## Project Updates

The **Hidden Lake Dam Removal project** will restore the Boeing Creek channel and wetland. Work includes removing the dam and lake, replacing nearby culverts, and installing new trails and a boardwalk at Shoreview Park. Final design and permitting is expected to be completed in early 2022 and construction is scheduled begin in summer 2022.

The stormwater system pumps at **Pump Station 26**, located just southwest of the intersection of 10th Avenue NE and NE 185th Street, have reached the end of their usable life. A more efficient design will move the entire facility underground. This will create a new public space with art and surface water education features in the heart of the Light Rail 185th Street Station neighborhood. Construction is scheduled to begin in 2022, and will be funded largely by American Rescue Plan Act (ARPA) funds.

# PLANNING FOR OUR FUTURE

## 2022 Budget



- Capital Projects: \$6,096,521**  
Funding to design and build stormwater system improvement projects.
- Program Staff: \$1,748,325**  
Cost of salaries and benefits for all Surface Water Utility staff and other City staff supporting Utility work.
- Repairs and Maintenance: \$1,058,000**  
As-needed and annual maintenance and repair work performed by City staff or contractors.
- Program Management: \$1,053,919**  
Administrative costs, tools, supplies, training, taxes, rentals, etc.
- Debt Service: \$542,082**  
Payments on bonds needed to fund capital improvement projects done in years past.
- City Overhead: \$811,948**  
Overhead for City support staff, such as payroll, legal, information technology, etc.
- Professional Services: \$414,650**  
Consulting services for plans and studies, engineering, program development, and water quality monitoring.
- Intergovernmental Services: \$254,542**  
Services provided by King County and Washington State such as laboratory and billing services.
- Fleet Vehicles and Equipment: \$133,763**  
Vehicles and equipment needed for Surface Water Utility projects, maintenance, and programs.
- Education and Outreach: \$36,300**  
Funding for informational mailings, rain garden rebates, and public education campaigns.

## Surface Water Management Fees

Surface water management fees (SWM Fees), along with bonds and grants, pay for the Utility's services. Total SWM Fees collected in 2021 were \$7,875,660.32. King County collects SWM Fees along with property taxes. All single-family homes pay the same base rate, which is about \$26 per month. Other properties' fees are based on the amount of hard surfaces onsite. Find more information on SWM Fee rates at [shorelinewa.gov/surfacewater](http://shorelinewa.gov/surfacewater)

The SWM Fee amounts billed annually to ratepayers (per Shoreline Municipal Code 3.01.400) include a Utility Tax of 6% calculated on gross revenue of the Surface Water Utility. Find more information on the City's Utility Tax at [shorelinewa.gov/taxes](http://shorelinewa.gov/taxes)

## 2022 SWM Fee Rates

Category	% Hard Surface	Annual SWM Fee	Unit
Single-Family Home	N/A	\$313.24	Per Parcel
Very Light	0% - 10%	\$313.24	Per Parcel
Light	> 10% - 20%	\$727.52	Per Acre
Moderate	> 20% - 45%	\$1,502.96	Per Acre
Moderately Heavy	> 45% - 65%	\$2,914.97	Per Acre
Heavy	> 65% - 85%	\$3,692.99	Per Acre
Very Heavy	> 85% - 100%	\$4,837.26	Per Acre



# PROTECTING OUR WATERS

Wildlife like salmon and orca need clean water in streams, lakes, and Puget Sound to survive. Most storm drains in Shoreline lead directly to natural water bodies without treatment. Any pollutants, like oil, pet waste, lawn care chemicals, soaps, or disturbed soils that rainwater touches can runoff to storm drains and harm wildlife.

You can help by taking simple, everyday actions that help protect clean water and habitat for wildlife like salmon, orca, shellfish, and more. Learn more at [pugetsoundstartshere.org](http://pugetsoundstartshere.org)

## Help Restore Shoreline's Forests and Parks!

The Green Shoreline Partnership aims to restore 240 acres of Shoreline's forested parks and natural areas by 2039! Join fellow Shoreline residents and help remove invasive weeds and plant native plants at a park near you!

Visit [bit.ly/VolunteerShorelineParks](http://bit.ly/VolunteerShorelineParks)

Last year alone, volunteers gave over 2,000 hours of their time and planted over 2,200 native plants!



**PHOTO:** A Soundview School teacher and student plant native trees and understory plants at North City Park.



## Keep Birds Healthy and Our Lakes Clean - Please Don't Feed the Ducks and Geese

**Feeding ducks and geese teaches them to wait around for food and leads to them pooping in mainly one place.** This causes a spike in the number of harmful germs at the beach, where people are most likely to enter the water. These germs can make people, pets, and wildlife sick. Let the birds find their food naturally and allow them to naturally spread out their waste, too.

**Feeding birds is bad for them.** When humans feed young birds, they take away opportunities for their parents to teach them how to find nutritious foods throughout the lake. This can reduce baby birds' chances of survival.

**Feeding ducks and geese "healthier" foods doesn't help.** While their stomachs appreciate more than bread and crackers, feeding ducks and geese anything near the beach still increases harmful germs in the water and takes away opportunities for young animals to learn natural food-finding strategies. Let ducks and geese be wild!

# FOR FUTURE GENERATIONS

## Water Quality Monitoring

Utility Staff monitor streams, lakes, and swimming beaches to assess health and long-term trends of our natural waterways. For more information on these programs, visit [shorelinewa.gov/waterquality](http://shorelinewa.gov/waterquality)

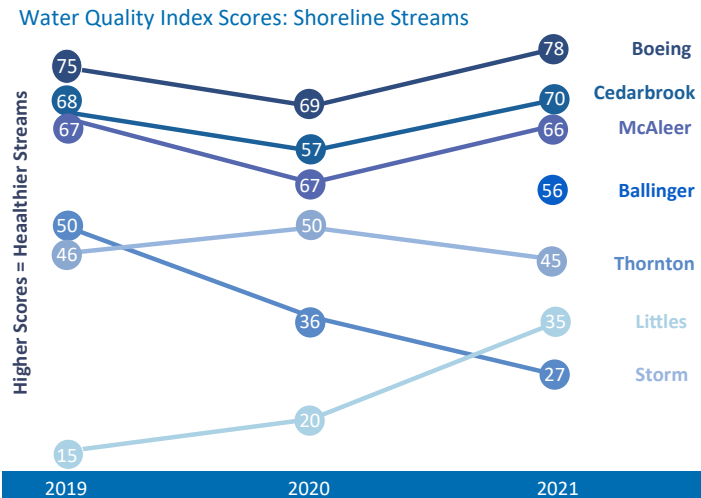
PHOTO: Staff collect water samples at McAleer Creek.



## Measuring Shoreline's Stream Health

We sample six of Shoreline's streams every month to track water quality levels. Data gathered include measures such as fecal bacteria levels, dissolved oxygen, phosphorus, and nitrogen levels. The data allows us to calculate a water quality index (WQI) score, which is one indicator of stream health.

Partway through 2021, we replaced the Cedarbrook Creek sampling station with one at Ballinger Creek. Cedarbrook Creek is a tributary of McAleer Creek, which is already sampled in this program. The addition of Ballinger Creek allows us to sample a stream in the Lyon Creek watershed, which was previously not included in this program.



The City is currently analyzing historical data to better understand trends in Shoreline's streams. This information will help us predict future health and develop targeted strategies for protecting and restoring Shoreline's streams. More information on this effort will be included in the 2022 Surface Water Utility Annual Report.

The adjacent graph shows annual water quality scores over the past three years. Healthier streams have higher WQI scores.

The adjacent graph shows annual water quality scores over the past three years. Healthier streams have higher WQI scores.



PHOTO: Rain garden in Richmond Highlands neighborhood soaks up rain runoff from a roof, allowing rainwater to soak into groundwater and return to nearby streams, lakes, and Puget Sound naturally.

**Does your yard need a makeover?  
Do you have drainage issues that need fixing?  
Wanting an outdoor space that helps the environment?**

The City offers a limited number of rebates to help property owners install new rain gardens and native landscaping. Rebates are up to \$2,000 for eligible properties and offered on a first-come, first-served basis.

These gardens protect local waters, support native birds and pollinators, and can help resolve pesky drainage issues. If you'd like to give your yard a more "Pacific Northwest" feel, a rain garden or native landscaping may be perfect for you!

To see if you qualify, visit [shorelinewa.gov/soakitup](http://shorelinewa.gov/soakitup)

### Soak It Up 2021

**10**  
Gardens

**8,326**  
Square Feet  
Treated

**\$18,668**  
In Rebates

**\$1,867.75**  
Average Rebate





17500 Midvale Avenue N  
Shoreline, WA 98133-4921

City of Shoreline Surface Water Utility  
2021 Annual Report

For a translated version of this information,  
email [clovelace@shorelinewa.gov](mailto:clovelace@shorelinewa.gov) or call  
(206) 801-2700.

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## REPORT SPILLS AND DUMPING

Spills happen - help us find them and clean them up! If you see anything that is not rain water enter an outdoor drain please call the City Hall 24/7 at  
**(206) 801-2700**

# HELP PROTECT CLEAN WATER

Para obtener una versión traducida de esta información, envíe un correo electrónico a [clovelace@shorelinewa.gov](mailto:clovelace@shorelinewa.gov) o llame al (206) 801-2700.

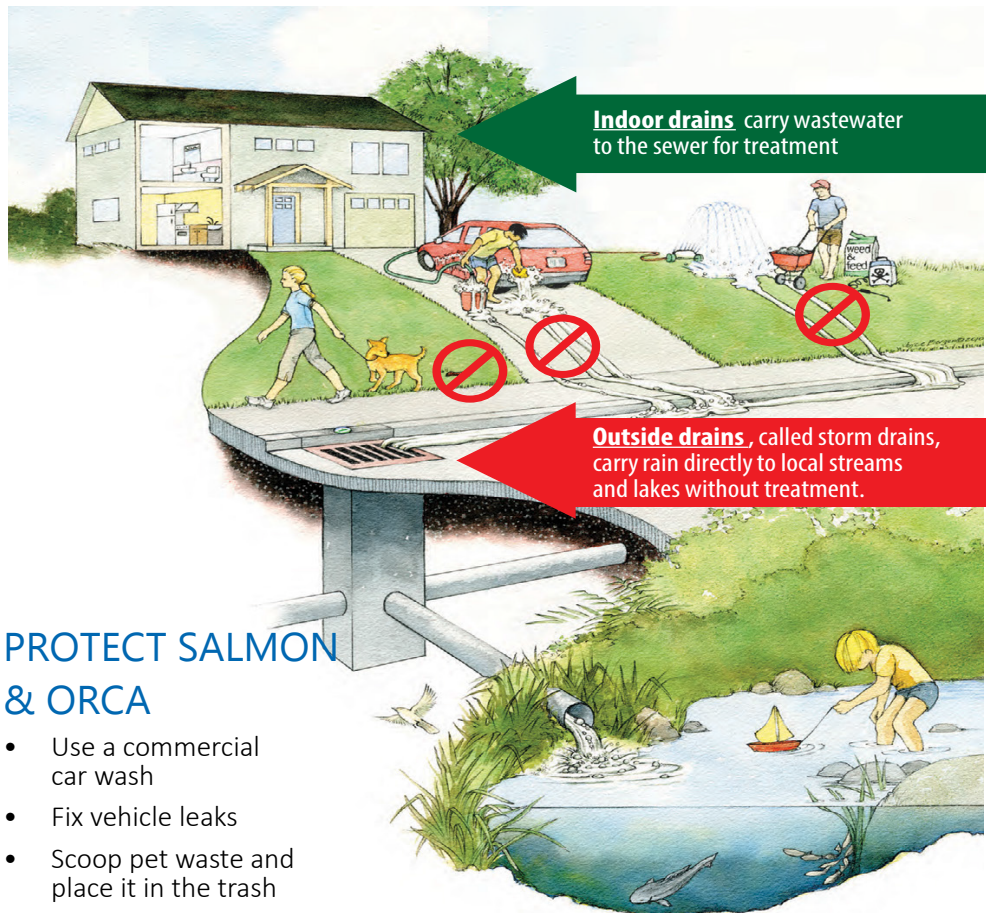
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### PROTECT SALMON & ORCA

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

