



# 2020 ANNUAL REPORT SURFACE WATER UTILITY

THE CITY OF SHORELINE Surface Water Utility manages the City's stormwater system to reduce flooding, follow environmental laws, and keep pollution from entering our streams, lakes, and Puget Sound. Each year, we work hard to reduce flooding and environmental risks from stormwater by inspecting and cleaning pipes, storm drains, streets, and ditches. We also install projects that reduce drainage problems and remove pollution from stormwater.

This report summarizes our 2020 work and provides updates on our 2021 budget, rates, and projects. While COVID-19 safety measures have required closing City Hall, the Surface Water Utility continues to provide all services and programs using safety protocols. This report also shares ways you can help us protect clean water in our streams, lakes, and Puget Sound. Visit our website to learn more about the Surface Water Utility: [shorelinewa.gov/surfacewater](https://shorelinewa.gov/surfacewater).



**Stormwater is Rainwater.** When rain falls on hard surfaces like streets, parking lots, rooftops, or driveways, it runs off into a system of drains, pipes, and ditches that carry rainwater to nearby streams, lakes, and, ultimately, to Puget Sound. This rainwater runoff is called 'stormwater.' Most of the stormwater in Shoreline is not treated, meaning that it carries any pollution it touches - like car leaks, garden chemicals, and dog waste - straight to natural waterways. Managing intense rain events and preventing stormwater pollution supports our region's spectacular wildlife, maritime economy, and quality of life.

## SHORELINE'S STORMWATER SYSTEM INCLUDES:

**139.5**  
Miles of  
Stormwater Pipes

**7,757**  
Storm Drains

**17**  
Stormwater Ponds

**48,506**  
Square Feet of  
Rain Gardens

## Shoreline Climate Impacts & Resiliency Study.

The City is committed to reducing negative impacts from climate change. To understand how our community is likely to be affected by climate change, a vulnerability assessment was completed in 2020. This type of assessment identifies areas of the city and populations that are most exposed to negative climate change impacts. Stronger rainstorms are expected to challenge portions of the City's stormwater infrastructure, with low-lying areas being most at risk for flooding. These impacts are likely to be felt most by lower-income households who will face greater financial barriers when fixing property damaged by floods. The study created a mapping tool that allows City staff to identify areas of vulnerability related to climate change when planning projects and programs. Learn more about the City's Climate Impacts and Resiliency Study here: [shorelinewa.gov/our-city/environment/sustainable-shoreline/climate-water-energy/adaptation-resilience](https://shorelinewa.gov/our-city/environment/sustainable-shoreline/climate-water-energy/adaptation-resilience)



**PHOTO:** Climate change is expected to cause heavier rainstorms, which may challenge the City's stormwater and stream flow systems and cause more frequent flooding in vulnerable areas.



# SURFACE WATER UTILITY

## Managing Surface Water Impacts

We manage the impact of stormwater on public health, safety, and the environment. Annual inspection and maintenance programs, such as street sweeping, pipe repair, and cleaning storm drains, ensure our system functions as well as possible to minimize flooding and pollution from stormwater. We also monitor the water quality in our streams, lakes, and swimming beaches to watch for potential threats to wildlife and recreation.



1,382

**Maintenance Work Orders** completed in 2020.

87%

completed as scheduled

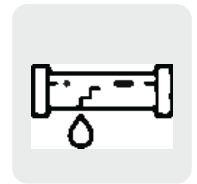


589

**Tons of Debris** removed by street sweeping in 2020.

\$106.89

per lane mile swept



10.4

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



During large storms, the City's storm response team responds to reported calls of flooding to provide any possible assistance. Rainfall and flooding data from large storms are used to better predict where flooding may occur and improve storm response. You can help us respond to large storms by reporting flooding to City Hall: **206-801-2700**.



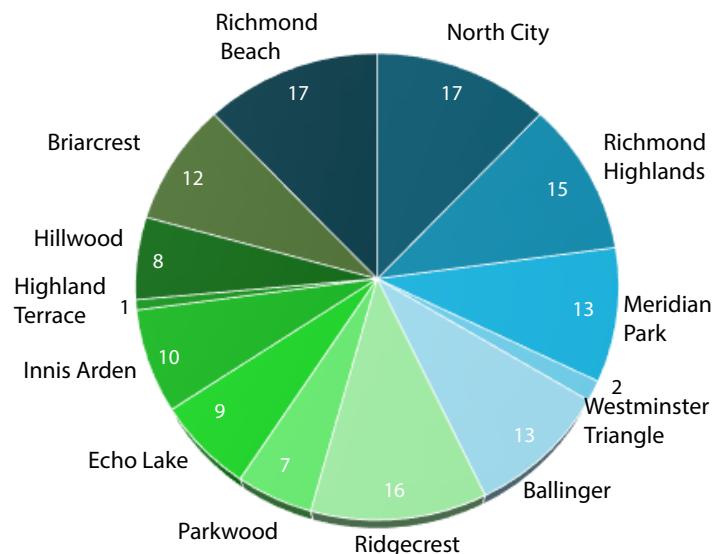
In 2020, the City repaired the maintenance access road for the M-1 Dam located on Boeing Creek near Carlyle Hall Road. Originally billed as a Capital Improvement Project, City staff reduced the scope of work which minimized impacts to Boeing Creek and led to around \$150,000 in cost savings.

## Providing Consistent & Equitable Service

We work hard to provide consistent and equitable service to Shoreline residents at a reasonable cost. Each year, the Utility responds to service requests from residents related to drainage, flooding, and other issues. In 2020, the City received 142 service requests, of which 99% were responded to. The adjacent chart shows the number of service requests addressed by neighborhood.

In 2020, 72 small repairs were completed around the City. Repair locations were identified using a combination of resident input and system assessments.

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



# 2020 ANNUAL REPORT

## Engaging the Community

We work with residents, businesses, and school groups to help improve water quality for wildlife and recreation. Through our Adopt A Drain, Storm Drain Marking, Lake Stewardship, and Soak It Up Rebate programs, we offer opportunities for residents to help us protect Shoreline's waters. You can find pollution prevention tips and resources shared on the Shoreline City Hall Facebook and Instagram pages, in the Currents Newsletter, and on our webpage: [shorelinewa.gov/cleanwater](http://shorelinewa.gov/cleanwater).



78

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

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



46

**Outreach Messages** published in 2020 in print, web and social media.

90%  
of households reached



46

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

18%  
increase in volunteers compared to 2019



Overuse of garden chemicals contaminates our streams, lakes, and Puget Sound, harming fish and wildlife. They're not healthy for children or pets either. It's easy to have a healthy, beautiful garden in the Pacific Northwest all while using fewer chemicals. The City hosted five natural yard care workshops to teach residents gardening methods that keep families and wildlife safe. Recordings of workshop videos available at [shorelinewa.gov/naturallyardcare](http://shorelinewa.gov/naturallyardcare)

Of the 66 reported spills, most were cleaned by the party responsible for the spill. City staff were needed to clean the 13 spills listed below. Reporting spills as soon as possible helps us clean spills before they enter storm drains and ditches. Help us by reporting all spills, 24/7, to City Hall: **(206) 801-2700**.

## Protecting the Environment

We work hard to protect and improve the water quality of the City's streams and lakes, and to follow State laws aimed to manage stormwater environmental impacts. By inspecting public and private stormwater systems, performing regular maintenance, responding to spills, and providing public education opportunities, we work to meet these requirements and protect the health of our natural waterbodies for wildlife and recreation.



77

**Private Facilities** inspected for pollution or maintenance issues in 2020.

49%  
required corrective maintenance



66

**Spills and Illicit Discharges** reported by the public, City staff, or party responsible for the spill in 2020.

28  
calls received from the public reporting spills to City Hall main line: **206-801-2700**



5,461

**City Stormwater Assets** inspected for maintenance or pollution issues in 2020.

100%  
within required schedule

Spill type	Number in 2020
Vehicle fluids	6
Latex paint	2
Construction water runoff	1
Heating oil	1
Concrete wash water	1
Roof coating	1
Unknown	1



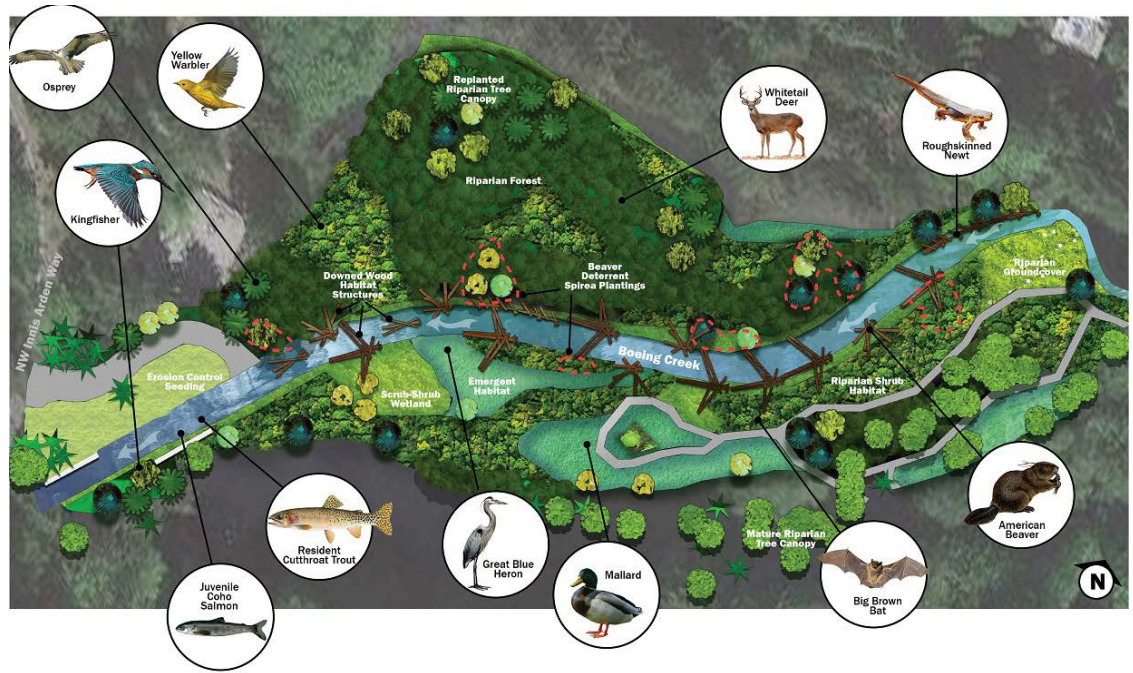
# IMPROVING OUR STORMWATER SYSTEM

Each year, the Utility completes repair and improvement projects around the City to better our stormwater system. Larger projects are part of the City's overall Capital Improvement Plan. Information on construction impacts is provided to nearby properties and is also available online at: [shorelinewa.gov/projects](http://shorelinewa.gov/projects).

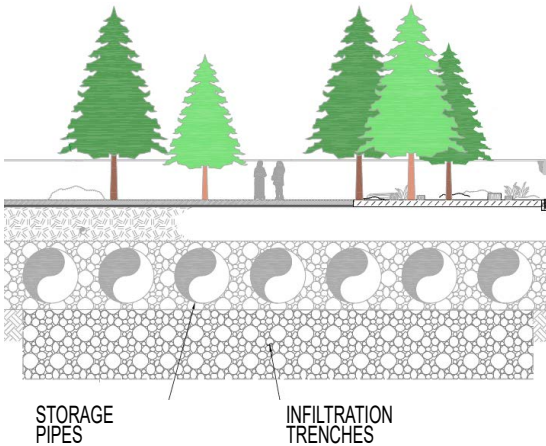
## Hidden Lake Dam Removal

The Hidden Lake Dam Removal project located at the southwest corner of Shoreview Park will remove the dam and artificial lake and restore the Boeing Creek channel and wetland to create habitat that can support a rich diversity of wildlife. Culverts under NW Innis Arden Way will also be replaced and a new trail and boardwalk will be installed in Shoreview Park.

- Project at 60% design
- Construction scheduled to begin 2023



**Graphic.** The restoration of the Boeing Creek stream and wetland at Hidden Lake is expected to support many types of wildlife.



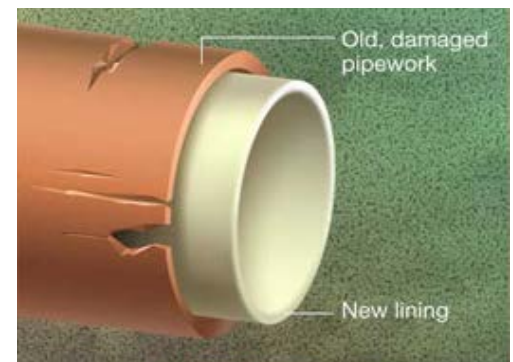
## Pump Station 26

Surface Water Pump Station 26 is located near NE 185th Street and 10th Avenue NE and supports drainage in much of the neighborhood around the future Light Rail 185th Street Station. The pumps have reached the end of their usable life, providing an opportunity to install a more efficient system. The detention pond will be converted into underground storage tanks, creating usable ground space for art and surface water education features, along with the potential for future park improvements.

- Project at 60% design
- Construction scheduled for 2021/2022

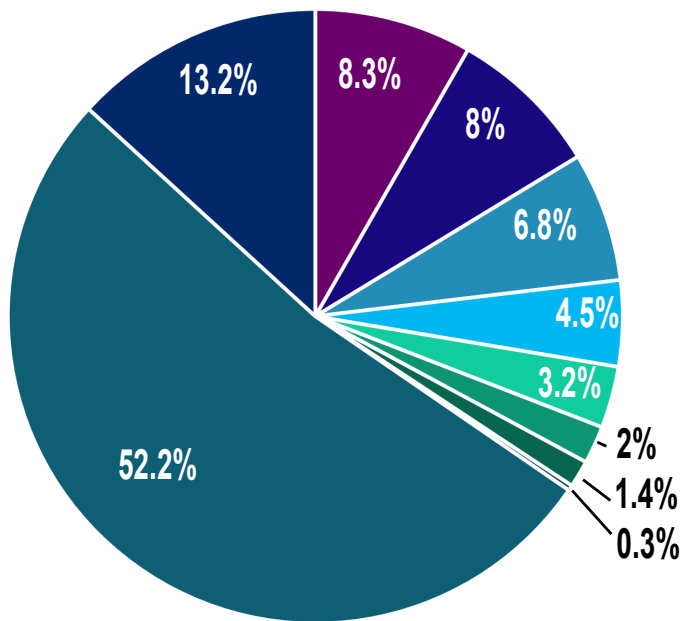
## CIPP: Trenchless Pipe Lining Repair

Many of Shoreline's underground storm pipes are over 50 years old. Some have small but serious defects, like cracks or separations, that can be repaired under the Utility's cost-effective Cured-in-Place Pipe (CIPP) program. CIPP is a trenchless method of pipe repair that uses a durable liner, which means repairs do not require cutting open pavement or digging. The 2020 CIPP project lined 3,100 feet of pipe mostly in the northwest areas of the City. In 2021 the City will focus on pipe repairs that require digging.



# PLANNING FOR OUR FUTURE

## 2021-2022 BUDGET



### 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 2020 were \$7,211,886.26. King County collects SWM Fees at the same time as property taxes, on April 30 and October 31 of each year. All single-family homes pay the same base rate, which is just under \$25 per month. Other properties' fees are based on the amount of hard surfaces on-site. More information on SWM Fee rates can be found here: [shorelinewa.gov/surfacewater](http://shorelinewa.gov/surfacewater)

The 2020 and 2021 SWM Fee amounts billed annually to ratepayers (per Shoreline Municipal Code 3.01.400) include a Utility Tax of 6% calculated on the gross revenue of the Surface Water Utility. More information on the City's Utility Tax can be found here: [shorelinewa.gov/taxes](http://shorelinewa.gov/taxes)

- Capital Projects: \$6,675,916**  
Funding to design and build stormwater system improvement projects.
- Program Staff: \$1,688,128**  
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: \$1,025,509**  
Administrative costs, tools, supplies, training, taxes, rentals, etc.
- Debt Service: \$870,191**  
Payments on bonds needed to fund capital improvement projects done in years past.
- City Overhead: \$579,377**  
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: \$181,917**  
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.

### 2021 SWM FEE RATES

CATEGORY	% HARD SURFACE	ANNUAL SWM FEE	UNIT
Single-Family Home	N/A	\$298.33	Per Parcel
Very Light	0% – 10%	\$298.33	Per Parcel
Light	>10% – 20%	\$692.87	Per Acre
Moderate	>20% - 45%	\$1,431.39	Per Acre
Moderately Heavy	>45% - 65%	\$2,776.16	Per Acre
Heavy	>65% - 85%	\$3,517.13	Per Acre
Very Heavy	>85% - 100%	\$4,606.91	Per Acre

# PROTECTING OUR WATERS

**WILDLIFE LIKE SALMON AND ORCA** need clean water in lakes, streams, and Puget Sound to survive. Most storm drains in Shoreline lead directly to natural water bodies without treatment. That means any oil, pet waste, and lawn care chemicals we leave on our roads, driveways, parking lots, and lawns can cause water pollution and harm wildlife. Because of water pollution largely from our communities, our Southern Resident orca and nearly all local salmon populations are considered endangered or threatened.

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



## WHAT YOU CAN DO FOR CLEAN WATER

**USE NATURAL YARD CARE PRACTICES**, like compost and mulch, instead of toxic garden chemicals like weed & feed and synthetic fertilizers. Learn more at [naturallyardcare.org](http://naturallyardcare.org).

**BUILD A RAIN GARDEN AND PLANT NATIVE** to return rain to groundwater, naturally. Shoreline properties can qualify for up to a \$2,000 rebate. Learn more: [shorelinewa.gov/soakitup](http://shorelinewa.gov/soakitup).

**PICK UP PET WASTE AND THROW IT IN THE TRASH - EVEN IN YOUR OWN YARD.** Rain can carry harmful fecal bacteria in pet waste in yards, streets, and parks to storm drains and then streams, lakes, and Puget Sound.

**SEND WASH WATER TO LAWNS, NOT THE STREET.** Direct wash water from outdoor cleaning projects to your lawn. Never direct it to the street, storm drains, or the ditches next to the road.

**SERVICE AND MAINTAIN YOUR VEHICLE**, fix car leaks as soon as you detect them.

**DRIVE LESS**, whenever possible. Pollution from tires and car leaks are some of the most serious sources of pollution in Puget Sound. Try combining errands into a single car trip instead of taking separate outings.

**CHOOSE COPPER-FREE BRAKE PADS**, the next time you have your brake pads replaced.

**USE A COMMERCIAL CAR WASH**, or wash car in lawn. Never allow car soap to enter road or storm drain, even if it is biodegradable.

**ADOPT-A-DRAIN** and help reduce pollution and neighborhood flooding by keeping storm drains clear of debris and trash. More info: [shorelinewa.gov/adopt-a-drain](http://shorelinewa.gov/adopt-a-drain).

**REPORT SPILLS & ILLEGAL DUMPING AS SOON AS POSSIBLE** to the City Hall Main Line: **(206) 801-2700**. Report oily sheens, dirty water, or anything unusual on roads or entering storm drains, creeks, or lakes.

**DON'T FEED DUCKS, GEESE, OR OTHER WATERBIRDS IN PARKS.** Human feeding of waterbirds can lead to larger than typical populations and overfed ducks which produce more poop in lakes and ponds, leading to beach closures.

**PLANT TREES, PLANT NATIVES, AND REMOVE INVASIVE SPECIES** at home or at volunteer restoration events. Find volunteer opportunities here: [shorelinewa.gov/i-want-to/volunteer](http://shorelinewa.gov/i-want-to/volunteer)

**DISCONNECT YOUR DOWNSPOUT** if you can safely direct water away from your house towards lawn or a landscaped area. This allows water return to groundwater sources naturally! Learn how: [bit.ly/disconnectdownspout](http://bit.ly/disconnectdownspout)

**USE, STORE, AND DISPOSE OF HOUSEHOLD CHEMICAL PRODUCTS CAREFULLY.** Use the recommended amount, store containers in a bin out of reach from kids and pets, and dispose of unused product at Household Hazardous Waste site. More info: [kingcountyhazwastewa.gov](http://kingcountyhazwastewa.gov).

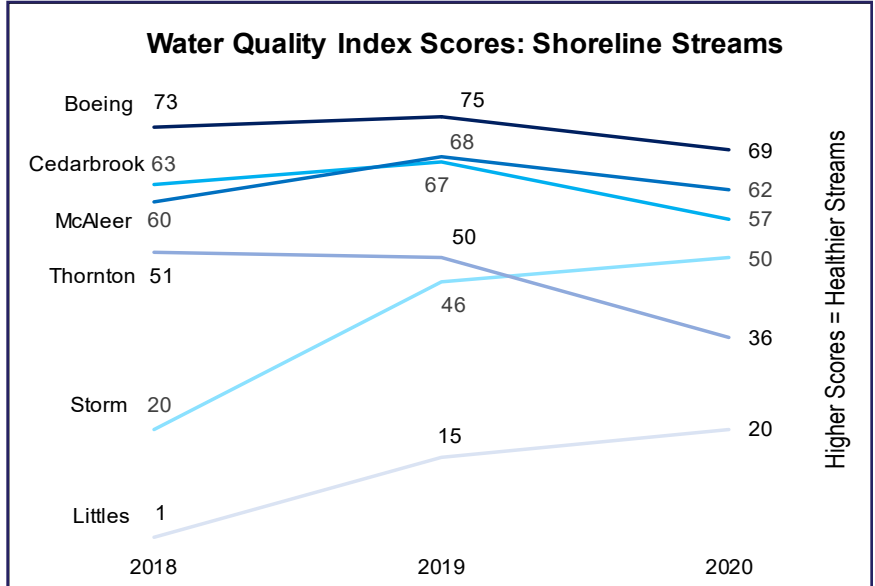


# FOR FUTURE GENERATIONS

## 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)

**Water Quality Index:** Six of Shoreline’s streams are sampled monthly to gather data on a number of parameters, including fecal bacteria, dissolved oxygen, and sediment levels. These parameters are used to create a water quality index, which describes the overall health of the stream (0 - 100), with higher scores indicating healthier streams. Monthly data is averaged into an annual water quality index score. The graph on the right shows trends for streams over the past three years.



**DNA Fecal Study:** Sampling results at Littles and Thornton Creeks indicate chronically high fecal bacteria pollution. To help locate the source of the waste, the Utility partnered with King County to conduct a series of DNA analyses. Preliminary results point to dog and human waste as the culprits. Dog and human waste can come from a number of activities, including failure to pick up pet waste in parks, streets, and even in one’s own backyard, leaky side sewers, and illegal dumping of waste in streams or storm drains. Local water quality data helps the Utility target and address high priority water quality issues. The City will be evaluating the water quality program in 2021 to improve effectiveness and efficiency.

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Want to turn your yard into an environmentally friendly, low-maintenance garden? Each year, the City of Shoreline offers a limited number of first-come, first-served rebates up to \$2,000 to help property owners install rain gardens and native landscaping.



**PHOTO:** Rain garden in Ridgecrest neighborhood soaks up rain runoff from a roof, deck, and driveway, filtering pollutants from tire and roof particles, car leaks, and other types of pollution.

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) to schedule a free site consultation. New this year, we’re offering an online workshop to help property owners learn how to design, build, and maintain these gardens – visit our website for more information.

### Soak It Up 2020

**7**  
GARDENS

**\$12,750**  
IN REBATES

**6,179**  
SQUARE FEET  
TREATED

**\$1,821.43**  
AVERAGE  
REBATE



17500 Midvale Avenue N  
Shoreline, WA 98133-

City of Shoreline Surface Water Utility  
2020 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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POSTAL CUSTOMER

PRSR STD  
US Postage  
PAID  
Seattle, WA  
Permit No. 248

Printed on 30% post-consumer recycled paper.

## 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.

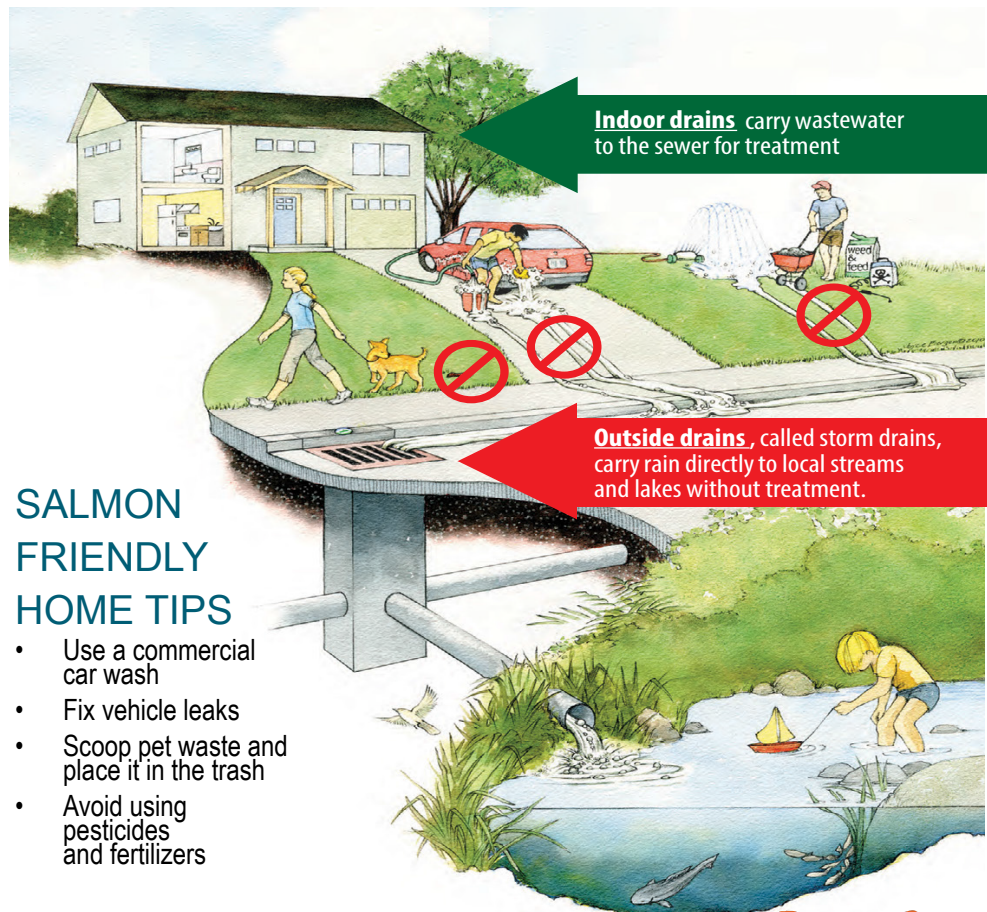
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Để nhận bản dịch của thông tin này, hãy gửi email về [clovelace@shorelinewa.gov](mailto:clovelace@shorelinewa.gov) hoặc gọi số (206) 801-2700.

如需本信息翻译版，请发送电子邮件至 [clovelace@shorelinewa.gov](mailto:clovelace@shorelinewa.gov) 或致电 (206) 801-2700。

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## SALMON FRIENDLY HOME TIPS

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

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