

### 2022 - 2023

# SURFACE WATER UTILITY ANNUAL REPORT

This report shares the work we accomplished in 2022 and provides updates to our 2023 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** 



Sidewalks and gardens designed to soak up rainwater from street. These gardens are filled with native plants that support birds and pollinators. Their curved shape alongside the road helps slow traffic and the greenery adds beauty to the street.

#### We Want to Hear from You!

The City is starting our Surface Water Master Plan update – a strategic plan that will guide Surface Water projects and programs for the next five to ten years.

We want to understand your priorities and concerns related to flooding; protecting natural waterways; planting trees and creating greenspace; and community programs.

We especially want to hear from community members that experience flooding, or live in areas with few trees or little nature. These are often communities that have been excluded from planning efforts. They include members of Black, Native nations, Hispanic or Latino, and Asian communities; people with limited English ability; and people with low or no income. As we work to reduce flooding and protect our natural environment, we want to hear from those most impacted by these issues.

To get involved, visit: shorelinewa.gov/SWMP

#### Surface Water projects and programs can benefit our City by:

- Reducing flooding.
- Protecting our environment and natural waterways.
- Restoring natural areas.
- Protecting wildlife, like salmon and orcas.
- Making Shoreline greener with trees and gardens designed to soak up rainwater. Trees and gardens help cool hot areas of the City and fight climate change.
- Supporting new permeable sidewalks that soak up rainwater and create safer, more walkable neighborhoods.
- Providing programs that help residents and businesses fix drainage issues and teach skills (like gardening or car care) that help prevent pollution.



A major restoration effort underway: Man-made Hidden Lake has been restored to a flowing section of Boeing Creek. Restoring Boeing Creek will help bring back wildlife that used to live here. Plants will grow to fill in the streamside over the next few years. A new boardwalk overlooks the newly restored creek and enhances the park for visitors.



The City's Soak It Up program offers rebates to property owners to help them install gardens that allow rainwater to soak into groundwater. These gardens can help solve some drainage issues, add beauty to a property, and support our environment. Photo shows a new garden with native plants and mulch.



# MANAGING RAINWATER IMPACTS



Clean Streets = Clean Streams!

Street sweepers pick up far more than leaves and garbage. They remove heavy metals, tire particles, and vehicle fluids from our roads before rain carries them into streams, lakes, and Puget Sound. Street sweeping helps keep our waters clean for our community and for salmon and orcas!



1,665

system is functioning.

Maintenance Work Orders completed.

80%

completed as scheduled



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, 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. Annual inspection and maintenance programs such as storm drain cleaning and pipe repair, ensure our

515

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

\$111.04

per lane mile swept



7.34

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

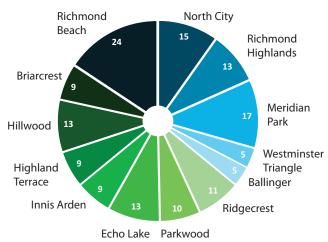


In low-lying areas of the City, pump stations move large flows of rainwater to higher ground.
This helps prevent flooding in areas where water is most likely to collect. In 2022, the City upgraded many of its pump stations with new data and alarm systems. These systems help City Staff correct issues quickly and prevent flooding.

# 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 2022, the City received 154 service requests.

## Service Requests by Neighborhood



## 58 small repairs and projects were completed around the city.

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.

# **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 such as Adopta-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** 



**57** 

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

Join us! shorelinewa.gov/adopt-a-drain



67

Outreach Messages
published in print, web and
social media.

90%

of households reached



30

Volunteers Engaged in Surface Water Utility Volunteer programs.



A huge thank you to Eliana and Koa of the Richmond Beach neighborhood! In 2022, Eliana and Koa marked over 100 storm drains in their neighborhood. The storm drain markers read, "No Dumping, Drains to Sound". These markers help residents understand that storm drains lead directly to Puget Sound. If Eliana and Koa have inspired you, sign up to mark storm drains in your neighborhood at shorelinewa.gov/getinvolved

# **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 by visiting our "Provide Comments" webpage at **shorelinewa.gov/surfacewater** 



56

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

64%

required corrective maintenance



**78** 

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

20

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



6,422

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

93%

within required schedule

Of the 78 reported spills, most were cleaned by the party responsible for the spill. City staff assisted in cleaning 18 spills. Reporting spills as soon as possible helps us clean spills before they enter storm drains, ditches, and natural waterways.

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



City staff apply absorbent as part of a large gasoline spill cleanup on Aurora Avenue.

## PREPARING FOR STRONGER STORMS

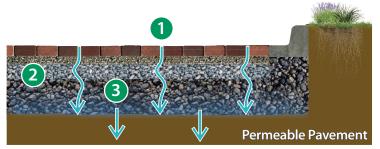
As our climate changes, Shoreline will experience more frequent and more intense rainstorms. Heavier rainfall will cause more frequent flooding in the City and higher flows in our streams that will harm fish and wildlife habitat. The City is working to prepare our drainage systems for climate change impacts. We are building projects to reduce the likelihood of flooding and protect our natural waterways. These projects typically:

- Increase the amount of rainwater soaking into the ground and/or
- Capture rainwater in ponds or underground tanks and slowly release it.

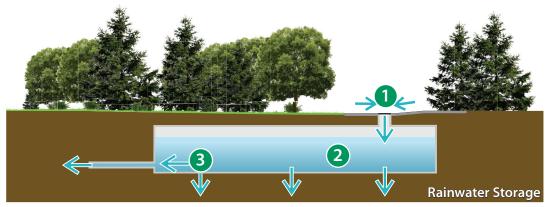
Three of the best tools to protect the City from heavy rainfall are shown below.



- Rainwater flows into garden.
- 2 Absorbent soils and plants soak up rainwater and filter out pollutants.
- 3 Cleaned water soaks deeper into the ground and slowly flows to nearby natural waterways.



- 1 Small spaces in the permeable pavement allow rainwater to soak in.
- 2 Layers of gravel and soil filter out pollutants as the water drains down.
- 3 Cleaned water soaks deeper into the ground and slowly flows to nearby natural waterways.



- Rainwater flows into large underground storage tank through storm drain.
- The tank holds large amounts of rainwater.
- 3 Rainwater slowly flows out through a small pipe. In some cases, rainwater also soaks into the soil below and slowly flows back into nearby natural waterways.

#### City projects that will help prepare Shoreline for more frequent and intense rainstorms

Project	Construction Completion Year (Expected)	Bioretention Area (square feet)	Permeable Pavement Area (square feet)	Volume of Rainwater Storage (gallons) * system includes infiltration
NE 148th St Infiltration Project	2023	2,738 sf	1,260 sf	45,115 gallons*
Surface Water Pump Station 26 Upgrades	2023	25 sf	4,000 sf	388,987 gallons*
20th Ave NW Sidewalks	2023		4,236.sf	6,882 gallons*

# SUPPORTING COMMUNITY CLIMATE ACTION

You can help fight climate change and soak up rainwater from heavy storms with your own yard! Start by removing lawn, invasive plants, and unused hard areas like patios and walkways. Mix compost into the soil, add trees and native plants, and top with woody mulch. These gardens restore natural cycles that soak up carbon dioxide and rainwater. The City of Shoreline offers programs to help you create gardens that make our City more resilient.

# Soak It Up: Rebates for Private Property Rain Gardens and Native Landscapes



Rain Garden in Richmond Beach neighborhood soaks up rainwater from over 1,981 square feet of rooftop!

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

#### Soak It Up 2022

**7** Gardens

**8,362** Square Feet Treated

**\$12,388** In Rebates

\$1,770 Average Rebate

# Communi-trees: Shoreline's Community Tree Planting Program

In 2022, the City provided free trees to Shoreline residents through a pilot program. Program participants selected one tree from six different varieties to plant at their home. They learned how to plant trees at an in-person training and also received a watering bag and mulch. Over 115 trees were planted through this program.

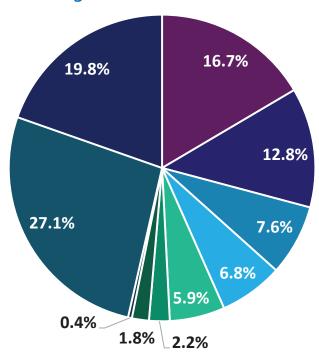
We are excited to offer this program again in 2023! Applications for Communi-trees will be available in July. Visit shorelinewa.gov/communitrees to sign up for email notifications.



Toddler looks up a tree planted through Communi-trees pilot program in 2022. Hopefully they will grow up together!

## PLANNING FOR OUR FUTURE

#### 2023 Budget

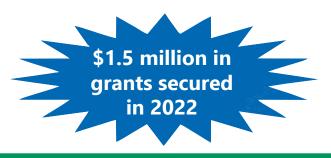


## **Surface Water Management Fees**

Surface water management fees (SWM Fees), along with bonds and grants, pay for the Utility's services. King County collects SWM Fees along with property taxes. All single-family homes pay the same base rate, about \$27 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

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





#### 2023 SWM Fee Rates

Category	% Hard Surface	Annual SWM Fee + taxes	Unit
Single-Family Home	N/A	\$328.91	Per Parcel
Very Light	0% - 10%	\$328.91	Per Parcel
Light	> 10% - 20%	\$763.90	Per Acre
Moderate	> 20% - 45%	\$1,578.22	Per Acre
Moderately Heavy	> 45% - 65%	\$3,060.72	Per Acre
Heavy	> 65% - 85%	\$3,877.64	Per Acre
Very Heavy	> 85% - 100%	\$5,079.12	Per Acre

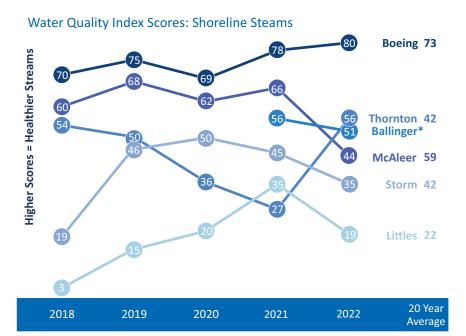
# FOR FUTURE GENERATIONS

## Surface Water Quality Monitoring

City Staff monitor our major creeks and Echo Lake to assess health and long-term trends of our natural waterways. For more information on these programs, visit **shorelinewa.gov/waterquality** 

#### 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



<sup>\*</sup> Sampling at Ballinger Creek began in 2021. No 20 year average available for this stream.

water quality index (WQI) score, which is one indicator of stream health.

In 2022, the City analyzed historical water quality data to better understand trends in Shoreline's streams. Water quality in Shoreline creeks remains relatively consistent from 2001 to 2020. This means the health of our creeks has not significantly degraded or improved. Fecal bacteria and dissolved oxygen levels remain the highest concern for most creeks. Boeing Creek consistently shows the highest water quality scores of Shoreline's creeks. Littles Creek shows the lowest. A final report will be available in summer 2023 at shorelinewa.gov/waterquality.

The adjacent graph shows annual water quality scores over the past five years and the 20 year average for each stream. Healthier streams have higher WQI scores.

## Source Control: Preventing Water Pollution from Private and Public Properties

In 2023, the City began a new inspection program called "Source Control". This program applies to businesses and government properties that conduct outdoor activities that could pollute water. City staff work with property owners and staff to identify potential sources of pollution and implement appropriate pollution prevention measures. These preventative measures help keep pollution out of storm drains and natural waterways. This program is required by the State. More importantly, it will help keep our streams, lakes, and Puget Sound healthy for residents, businesses, and wildlife. Learn more at shorelinewa.gov/sourcecontrol

#### You Can Prevent Water Pollution at Your Workplace



#### Have a Spill Kit Ready

Be prepared for spills by having a spill kit on hand and spill plan posted.



#### **Maintain Your Dumpster**

Close dumpster lids and keep the area clean. Swap out dumpsters or compactors if they have holes or leak.



#### **Store Hazardous Materials with Care**

Label hazardous materials and store inside or provide proper cover and containment. Never store near a storm drain.



#### Only Let Rain Down the Drain

Never wash pollutants (soap, mop water, oil, etc.) into storm drains. Keep them clear of leaves and other debris.



17500 Midvale Avenue N Shoreline, WA 98133-4921

City of Shoreline Surface Water Utility 2021 Annual Report

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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 a storm 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 o llame al (206) 801-2700.

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