

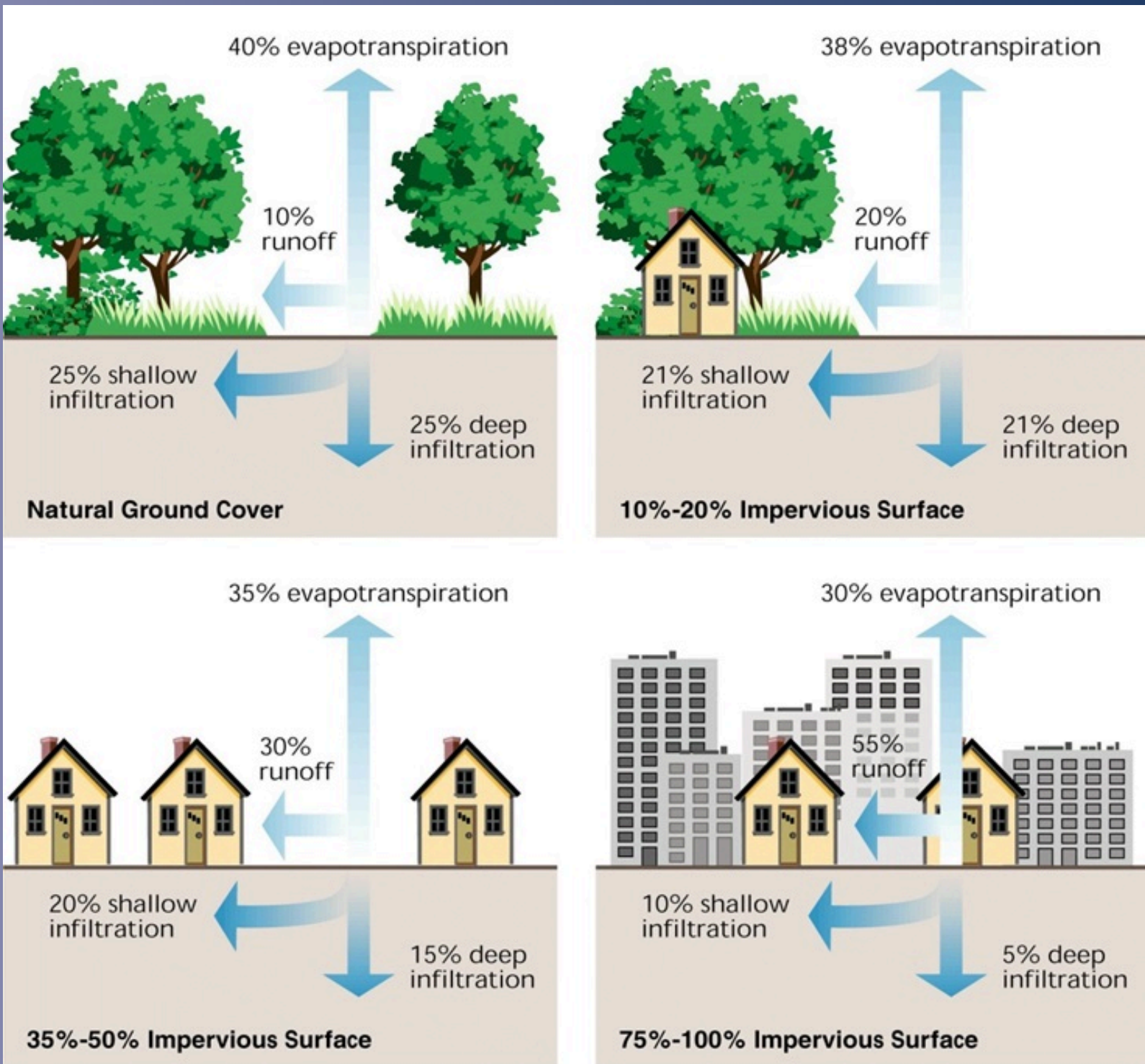


# Stormwater Management Program

The City manages stormwater in the city in accordance with the National Pollution Discharge Elimination System (NPDES) Municipal Phase II Permit.



# Why is Stormwater Management Important?



When a city grows, there are more hard surfaces like roads and buildings. Instead of absorbing into the ground, rainwater runs off these hard surfaces. This is called stormwater runoff, and it can pick up dirt and pollution from streets and yards and carry it to our lakes and streams. By creating tools, programs, and education, we help keep our lakes and streams clean.

# HOW DO WE MANAGE STORMWATER?

## *What is stormwater?*

Stormwater is water from rain or melting snow that flows off hard surfaces like roads, sidewalks, and buildings. As it flows, it picks up litter and other pollutants and carries them into lakes and streams.

The Stormwater Management Program has ten main parts. Every year, we update this plan to let the community know what the City is doing to manage stormwater and keep our lakes and streams clean.



## PROGRAM ELEMENTS



Stormwater Planning



Education & Outreach



Public Participation



System Mapping



Illicit Discharge Detection



New & Redevelopment



System Retrofits



Source Control



Operations & Maintenance



Water Quality Testing

# Stormwater Management Plan Updates

## Program Updates

Updates to the plan are made annually, in the first quarter of the year. Updates reflect events and information for the upcoming year.

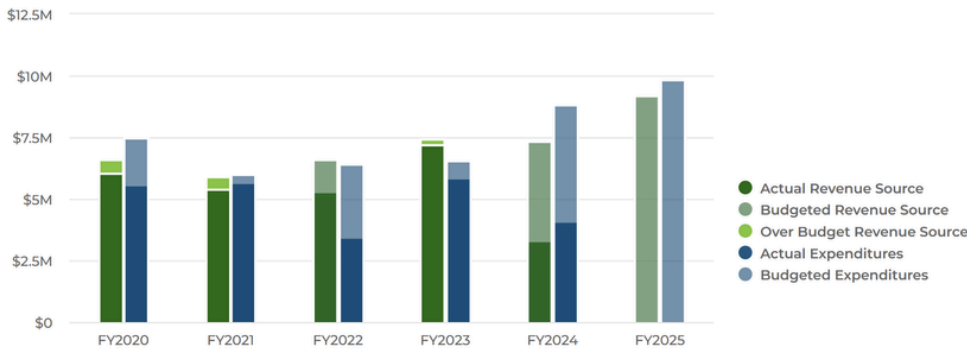
The public is encouraged to comment on the program and raise issues that may need to be added.

Overall program updates are based on regulatory requirements and are prioritized in accordance with the Public Works adopted Strategic Plan (right).

Five Year Strategic Plan Focus Areas				
Track and Maintain Natural and Built Environment	Improve the Natural Environment and Provide Accessible Infrastructure	Ensure Responsible Stewardship of Public Funds to Deliver Reliable Public Works Services	Make Public Works a Great Place to Work With Empowered a Skilled and Responsive Workforce	Foster Positive Relationships with the Public, Other City Departments and Other Agencies
Understand our infrastructure, including its condition, location, maintenance needs, and replacement cycle	Prepare and maintain a 20-year Capital Facilities Plan w/6-year Capital Improvement Plan, TIP	Utilize labor efficiently (labor vs. workload)	Provide employees training to advance personal and strategic goals	Other agencies and the Public know who and how to contact Public Works
Optimize the use of resources to deliver the desired levels of service	Construct Capital projects that are accessible and safe for all	Quantify and justify what Public Works does and what is needed	Employees deliver quality work products efficiently and safely	Improve external communication and education
	Construct Capital projects that improve the natural environment	Maximize the use of alternative funding sources	Empowering employees to make decisions for how to effectively complete their work	Ensure regulatory compliance in all areas
		Efficiently spend tax dollars	Employees advance their careers in the City	We are trusted by others

## Summary

The City of Lake Stevens is projecting \$9.22M of revenue in FY2025, which represents a 25.3% increase over the prior year. Budgeted expenditures are projected to increase by 11.3% or \$997.93K to \$9.86M in FY2025.



## Budget Information

The stormwater program is primarily funded through stormwater management utility taxes placed on residential and business properties within the City of Lake Stevens. The stormwater program also seeks grant funding for large-scale programmatic changes and capital projects.

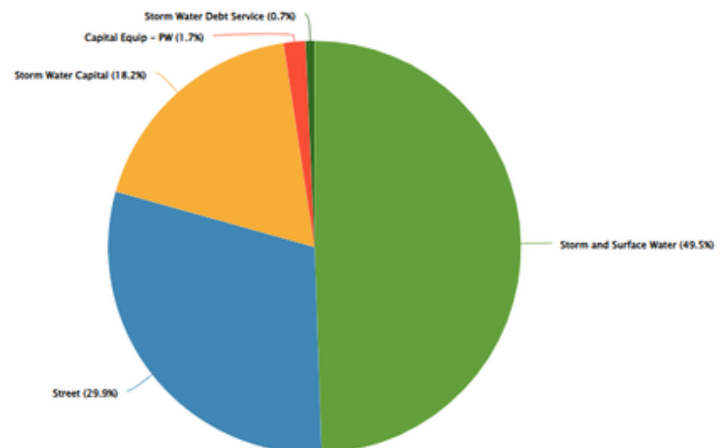
In 2026, the City will do a stormwater utility rate study to evaluate stormwater utility taxes and update rates starting in 2027.

## Expenditures by Fund for Public Works Department

The stormwater management program accounts for approximately 50% of the expenditures for Public Works.

## Expenditures by Fund

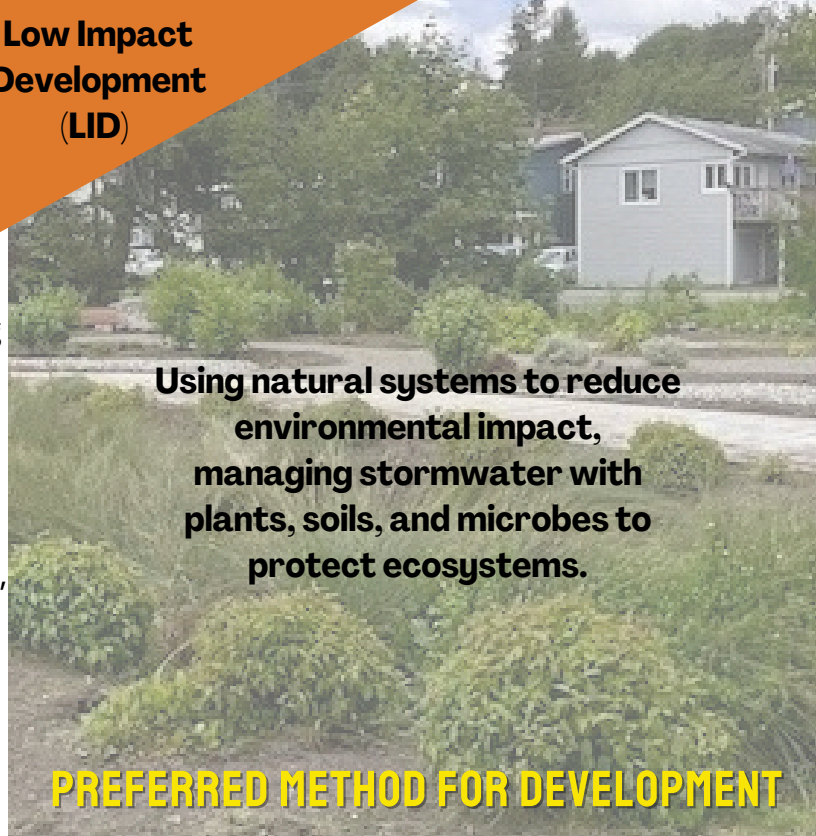
2025 Expenditures by Fund





# Program Planning

Low Impact Development (LID)



**Using natural systems to reduce environmental impact, managing stormwater with plants, soils, and microbes to protect ecosystems.**

**PREFERRED METHOD FOR DEVELOPMENT**

Long-range planning is key to implementing a comprehensive stormwater management program and identifying ways to protect and improve water quality. The Public Works Department collaborates with outside agencies, internal City departments, and the community to determine issues, identify comprehensive interdisciplinary solutions, and engage all stakeholders toward meeting the department's goals.

The City has several long range planning efforts to kick-off in 2025. These plans are designed to better understand our natural and built environment and how the two can work together to achieve water goals, improve natural habitat, and provide functional and aesthetic infrastructure for the community.

## Long Range Plans for 2025



### Salmonid Basins Plan

This plan will evaluate drainage basins to identify priority areas to improve water quality and salmon habitat in long range comprehensive plans.



### Engineering and Development Design Standards

This project will incorporate LID designs into the City's construction standards.



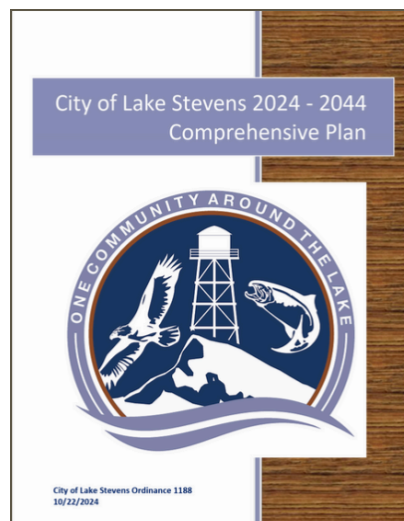
### Enhanced Maintenance Plan

This plan will create a customized stormwater infrastructure maintenance program to improve water quality and minimize failures.

**Stay tuned on the City's website for more about these plans and how you can provide input!**



**Residential roadside bioswale to capture, treat and detain stormwater**



## Technical Staff Review (TSR)

TSR is an interdisciplinary team of City staff and outside utility agencies that meets bi-monthly to discuss upcoming development projects, code updates, and long-range plans. This process helps to eliminate barriers to achieving stormwater management and watershed goals.



# Education and Outreach

Community Working Together to Improve Water Quality

**WE WANT TO HEAR FROM YOU!**

Scan the QR code to take the survey!



[bit.ly/42sfGmx](https://bit.ly/42sfGmx)

The City of Lake Stevens is reevaluating the education program in 2025. We are looking to the community to help us do that.



## 2025 EVENTS

Based on the survey, the City will develop events that interest the community. Follow the City website for more details!

Look for us at the **Farmers Markets** to learn about stormwater and Have Fun!



## 'I LOVE LAKE' CAMPAIGN

The I Love Lake Campaign promotes the positive actions homeowners can take to prevent algal blooms in Lake Stevens. Unfortunately, the lake has had high levels of phosphorus – a natural nutrient that all plants need to grow. In excess amounts, it causes problematic algal blooms. Natural yard care and maintenance of private stormwater facilities are things residents can do to promote better water quality. To learn more about the program or access resources, visit the [I Love Lake website](#).



# PUBLIC PARTICIPATION

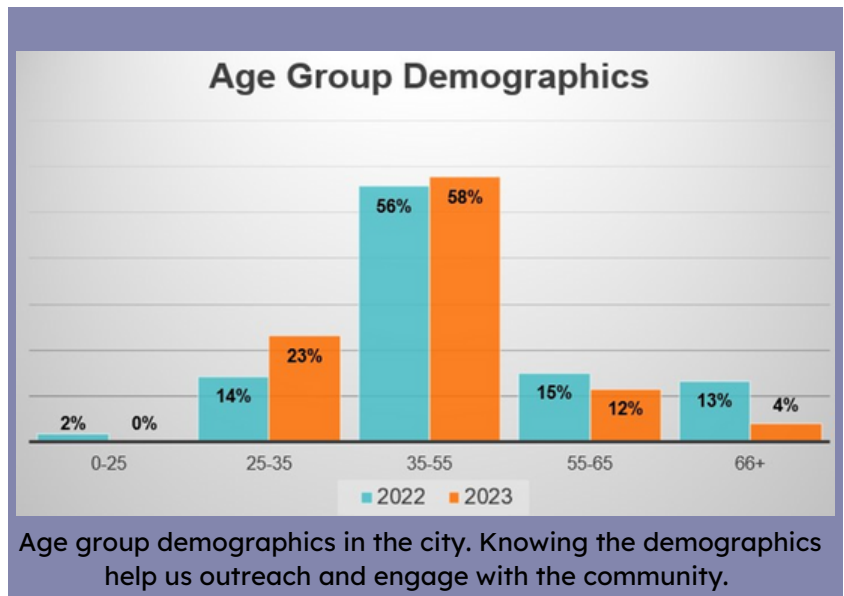
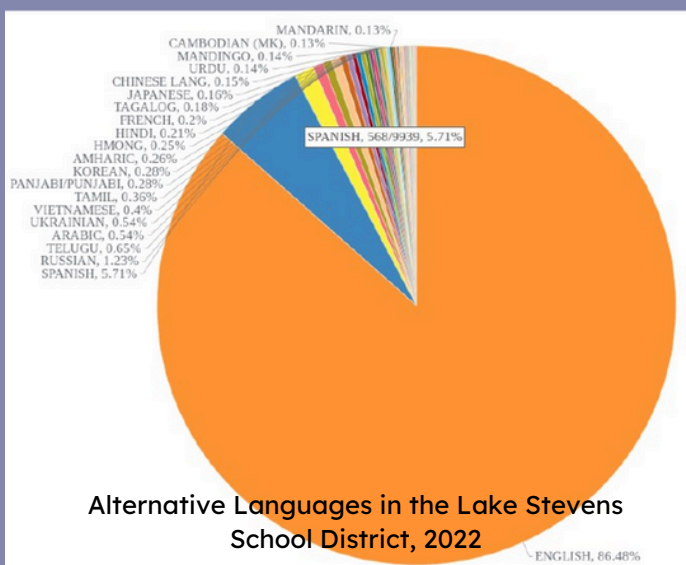
The City is committed to providing ongoing opportunities for public engagement in the development, implementation, and update of the Stormwater Management Program.

## What to expect in 2025

New interactive webpages hosted through ZenCity for Surface Water Programs.

Public engagement opportunities for long-range plans.

Engagement strategy for reaching over-burdened communities.



The Annual Stormwater Management Program Plan is available for comment through summer 2025!

[Stormwater Management Program ZenCity Page](#)

View the 2024 NPDES Annual Report and send us your comments or questions!

[SurfaceWater@LakeStevensWA.gov](mailto:SurfaceWater@LakeStevensWA.gov)



# Stormwater System Mapping

The City maintains a Geographic Information Systems (GIS) map of stormwater infrastructure. This is an important component to understanding the way stormwater moves through the city, as well as to ensuring proper maintenance of the facilities. The City continues to map new facilities and reviews and updates existing mapping.

**Check out the online map!**

[GIS Comprehensive Map](#)



Stormwater Infrastructure At A Glance	
Catch Basins (city-owned and maintained)	6,082
Stormwater Facilities (public and private)	383
Miles of stormwater pipes	137
Miles of stormwater pipes inspected (2024)	14

## Mapping Updates for 2025



### Tree Canopy Inventory

Map tree canopy throughout the city. This information will support goal and policy decisions as well as evaluate the impacts of tree canopy to improve stormwater management.



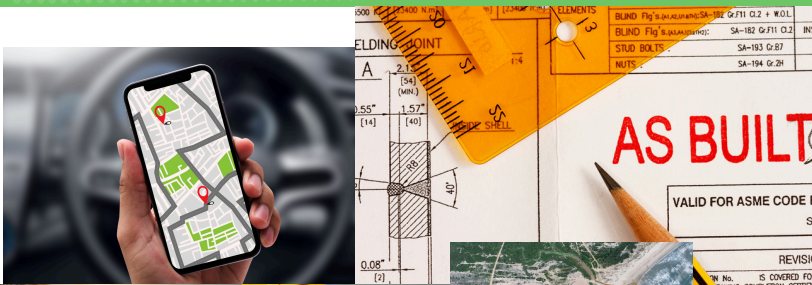
### Outfall Mapping

By 2028, the City will map all contributing basins to outfalls with 24-in nominal diameter or greater. An outfall is the location where the stormwater system drains to a natural water body.



### CCTV Inventory

44 miles of pipes are expected to be inspected with closed circuit TV inventory by the end of 2026. This inventory updates asset condition ratings and provides baseline data for capital facility planning.



## How do we collect data?

The City uses a combination of methods to collect spatial data of assets and information (attributes) about the assets. This data is stored in GIS.

- Handheld devices to collect data in the field.
- Aerial imagery to assess asset locations.
- As-built drawings for asset locations and attributes.

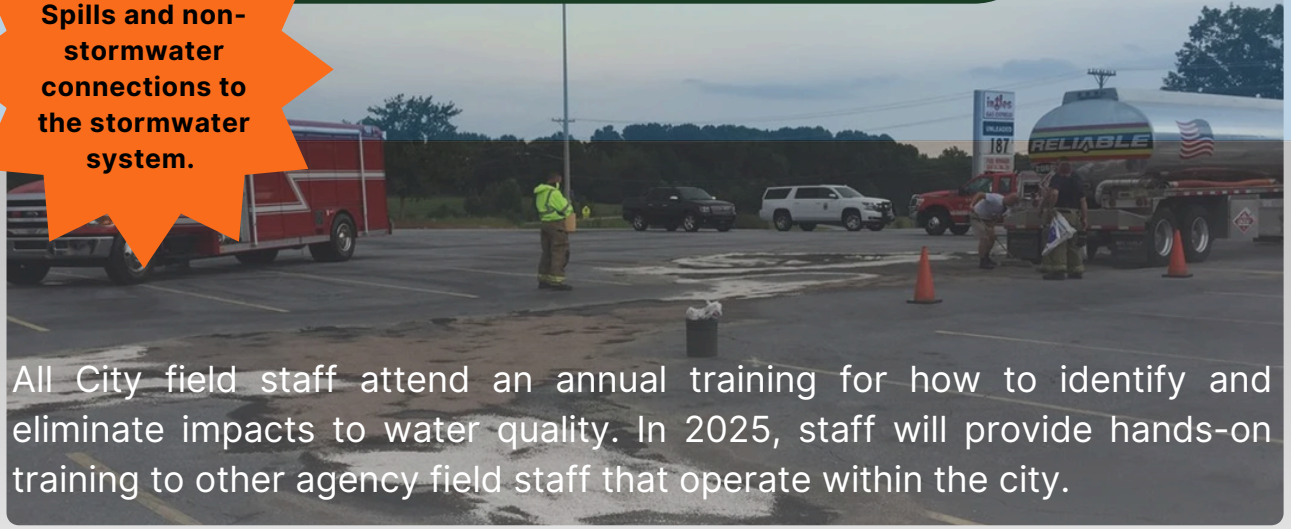




# Illicit Discharge Detection

**Illicit Discharge: Spills and non-stormwater connections to the stormwater system.**

All City field staff attend an annual training for how to identify and eliminate impacts to water quality. In 2025, staff will provide hands-on training to other agency field staff that operate within the city.



## How do we respond?

*A standardized process. We follow procedures in the 2020 ICID Field Screening and Source Tracing Guidance Manual for responding to a spill based on the type and size of spill. It first starts with identification.*

**The public plays a big role in the first step!**



## What are the impacts?

*Harm. Spills have the potential to harm the environment, our welfare, and potentially human health. Our stormwater system connects to the Lake and streams around us.*

**Protect the lake and streams!**



## What happens if I cause a spill?

*Report it! It is important to report spills as soon as they happen so the City can provide immediate assistance. If you have a business, be prepared for a spill. Reach out to us to learn how. **Negligent spills will be subject to enforcement.***

## How do I know what can and can't go down the stormwater drain?

The City has a list of common things that are allowed, sometimes allowed, and not allowed to be dumped in the stormwater drain. Visit the list in our municipal code:

**LSCM 11.06.100**



**Is washing your car in the driveway considered a spill?**

Yes! It's a spill if the wash water runs into the stormwater drain in the street.

**Instead, direct the water to a lawn or landscaped area.**



# REPORT A SPILL: 425-622-9403

Report a general water quality or drainage concern by downloading the App or scan the QR Code to submit a Service Request



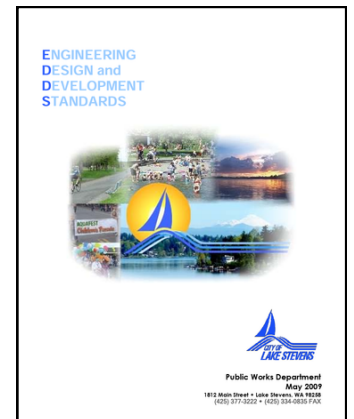
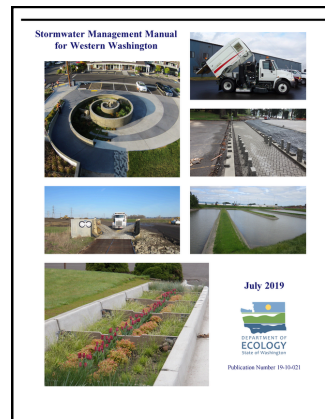


# NEW AND REDEVELOPMENT

The City has regulations for stormwater management when a property is being developed or redeveloped. The regulations ensure stormwater is treated to reduce pollution in our streams and Lake, and managed to prevent localized flooding.

## How do we manage stormwater?

Through development permit review, we can look at how stormwater is being managed. Lake Stevens Municipal Code has adopted the 2019 Stormwater Management Manual for Western Washington and the 2009 Engineering Design and Development Standards. Both of these manuals are used to set the requirements and standards for stormwater management. The documents at right are links:



2024 Metrics	
# of stormwater management plans reviewed for new and redevelopments	227
# of active construction sites inspected for temporary erosion and sediment control	22

## What's New:

Engineering Design and Development Standards (EDDS) - Update coming in 2025

2024 Stormwater Management Manual for Western Washington (SWMMWW) - Coming by 2027



Active Construction Site Best Management Practices (BMP) for controlling runoff of exposed soil.

All staff that conduct inspections of active construction sites are certified sediment and erosion control leads.



**EDDS Update**  
**Prioritizing Low Impact Development in Standard New Road Designs**

Low Impact Development Swale for Road Runoff



# SYSTEM RETROFITS

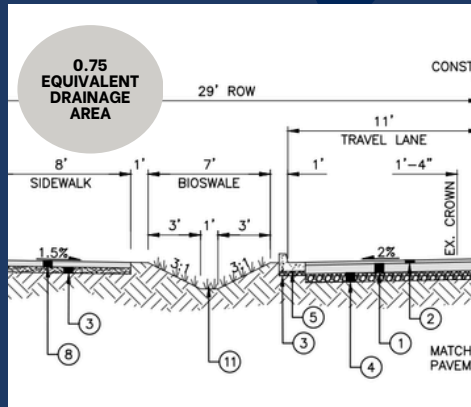
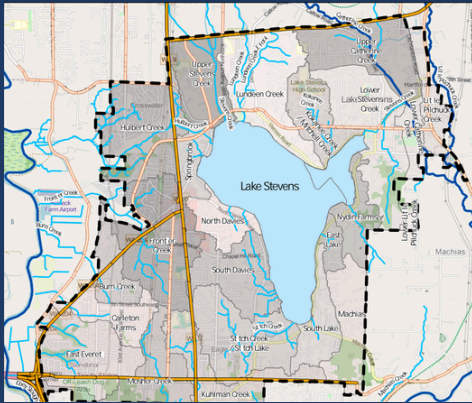
## EXISTING DEVELOPMENT

This is a brand new 2024-2029 NPDES permit requirement. System retrofits for existing development aims to evaluate existing infrastructure and identify areas for retrofits or new capital projects. The goal of implementing these projects is to reduce stormwater discharges to downstream waters like streams and the lake. Each project would contribute to the City's required "equivalent drainage area" that was assigned in the permit.

**6.5 ACRES  
LAKE STEVENS  
EQUIVALENT  
DRAINAGE  
AREA**

## Our Approach for 2025

Raingarden at North Cove Park



## Watershed Basin Planning

In 2025, the City will start a multi-year watershed basin planning document that will guide policies and goals as well as identify areas to prioritize retrofits to improve water quality.

## Opportunistic Projects

Opportunistic projects generally come in the form of planned and funded capital projects. In 2025, the City will add a bioswale for stormwater treatment for road runoff in the City's identified industrial area.

## Completed Projects

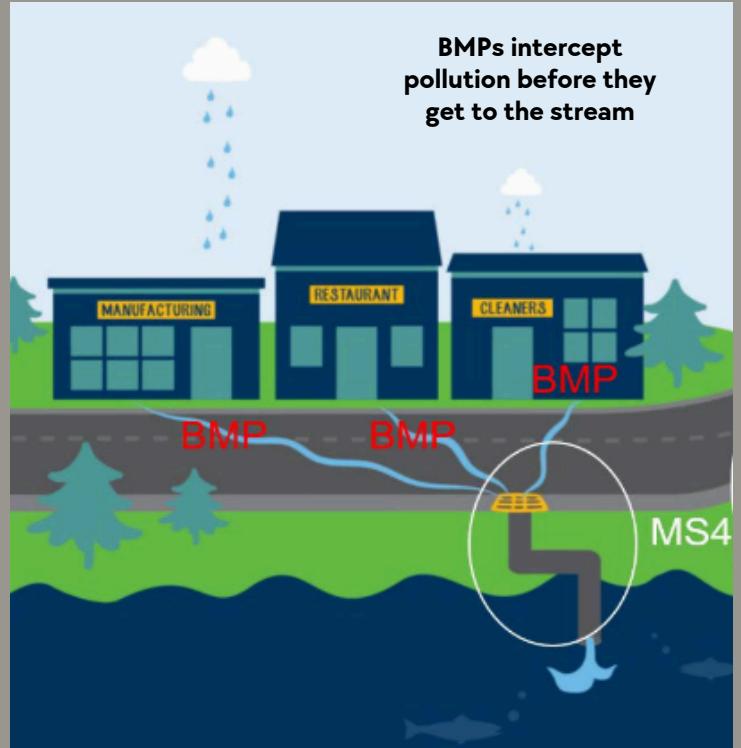
In 2024, the City worked with a contractor to clean 14 miles of stormwater pipes.

The City also purchased approximately 7 acres of land for a future stream restoration project to move Lower Stevens Creek from a manmade ditch along the road to its natural flow path.



# Source Control

Source Control is a program that identifies businesses within the city that have the potential to pollute stormwater runoff based on the nature of the business. Common business types include automotive, construction, restaurant, industrial, etc. The program works with business owners to identify potential sources and implement operational or structural best management practices to reduce the risk of stormwater pollution.



BMPs intercept pollution before they get to the stream

**235  
Businesses  
Identified for  
the  
Program**

City staff perform 20% of the inspections per year based on total number of businesses identified in the program. At least 47 inspections are performed per year.

A "**Potential Pollutant Site**" is a business or activity on private property that generates significant pollution or prohibited contaminants. These sites are inspected under the Source Control Program and evaluated based on how their materials interact with stormwater or surface water, potentially causing prohibited discharges.

## Progressive Enforcement



Enforced

Business corrections are based on progressive enforcement. **We work with you to find a solution.**



Drums of chemicals left near a wetland and oozing fluids



Open dumpster lid allows rainwater to mix with pollution





# OPERATIONS AND MAINTENANCE



## WHY IS IT IMPORTANT TO MAINTAIN STORMWATER INFRASTRUCTURE?

Regular maintenance of stormwater infrastructure helps to keep pollutants out of our streams and lakes. Stormwater infrastructure is also designed to mitigate local flooding.

Maintenance of the stormwater system is tracked through the City's asset management software.

## HELP US IDENTIFY MAINTENANCE NEEDS



Report a general water quality or drainage concern by downloading the App or scan the QR Code to submit a Service Request



Need help downloading the App? Visit the [User Guide](#).



Stormwater Detention Pond



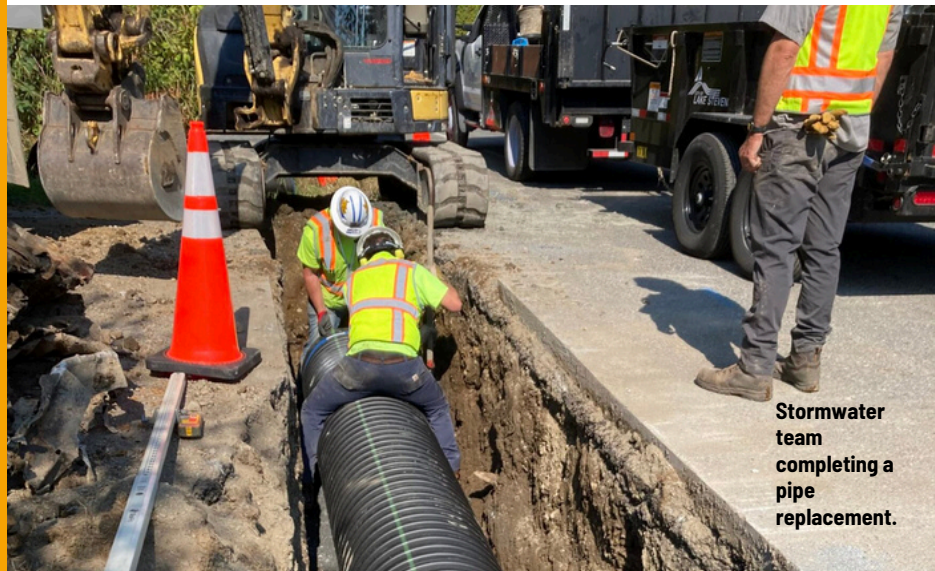
Stormwater Catch Basin

## WHAT DO WE MAINTAIN?

The stormwater operations and maintenance team maintains the publically owned stormwater infrastructure that consists of:

- Catch Basins
- Ditches
- Road sweeping
- Flow Control: Detention ponds, Detention Pipes, and Vaults
- Low Impact Development Infrastructure (rain gardens, bioswales, etc.)
- Stormwater treatment facilities

Maintenance Stats	2024
Public Stormwater Facilities Inspected	125
Public Facilities that Required Maintenance	81
Stormwater Catch Basins Cleaned	833
Miles of Stormwater Pipe Cleaned	14
Work Orders Completed	5,298
Miles of Roads Swept	1,200



Stormwater team completing a pipe replacement.

# A Snohomish County Streams Corrective Requirement



# Water Quality Improvement

Sign that was designed by City staff to remind people to clean up after their pets.

A series of studies of the public water bodies in Snohomish County determined that, for all streams in the County, the primary pollutant making water not meet standards is fecal coliform, which is a bacteria primarily sourced from warm blooded mammals. The US Environmental Protection Agency issued a requirement to correct the problem with a Total Maximum Daily Load (TMDL) program.

Our stormwater plan addresses these issues:



**Screening for the Pollutant**

## When is bacteria in the water measured?

Screening occurs when an active spill investigation of the stormwater system takes place - a random opportunistic event. Water samples from the furthest downstream outfall are collected and sent to a lab. If fecal results are high, then the City will investigate the source.



**Inspecting Businesses**

## What businesses might contribute to the issue?

As part of the Source Control program, we have included facilities that include animal care and boarding, and composting or other operations involving animal waste. Our inspections work to correct deficiencies and promote best management practices.



**Education**

## How can individuals get involved and help out?

We install signs and stations for individuals living in or visiting the city parks to help with minimize the sources of fecal coliform in our watersheds. By picking up pet waste and disposing of it in a receptacle, a significant source of the pollutant is reduced.