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Prepared by the Lake Whatcom  
Interjurisdictional Coordinating Team

# 2025 Lake Whatcom Progress Report



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# Table of Contents

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## Program Overview

Introduction	1
Phosphorus and Lake Whatcom	2
2025 Highlights	3

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## Work Plan Program Areas and Objectives

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### Program Areas

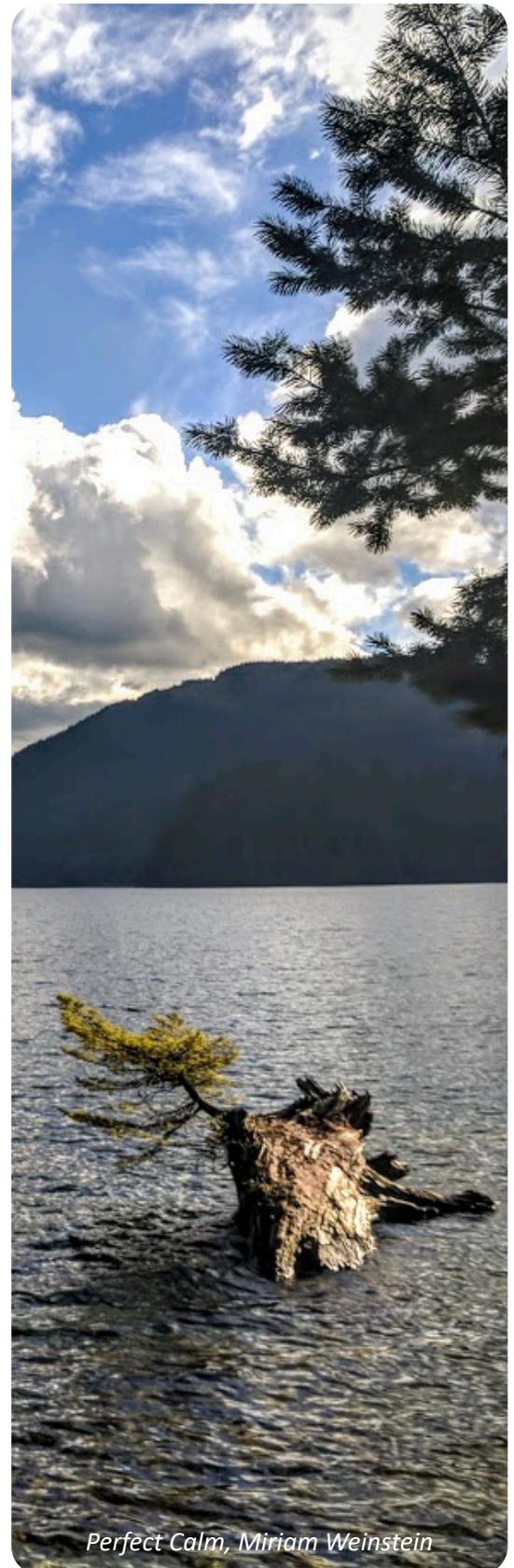
Land Preservation	5
Stormwater Management	7
Land Use	10
Monitoring and Data	11
Hazardous Materials	13
Recreation	15
Aquatic Invasive Species	17
Utilities and Transportation	20
Education and Engagement	23
Administration	25
Climate Action	26
Forest Management	27

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### Appendix

2025 Lake Whatcom Expenditures	31
2025 Lake Whatcom Annual Report Metrics	32

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*Perfect Calm, Miriam Weinstein*

# Introduction

Since time immemorial, Lake Whatcom has played an important role in the quality of life for the people and ecosystems surrounding it. The Lake Whatcom watershed was first inhabited by Coast Salish Tribes, who cared for the land long before European settlers arrived. Today, Lake Whatcom is the drinking water source for more than 120,000 people, valuable habitat for plants and animals unique to our region, a recreational destination for outdoor enthusiasts, and home to more than 19,000 people.

Improving the health of the lake and its surrounding forests and ecosystems while balancing human activities is no small task. Watershed residents and visitors play a critical role in this effort through stewardship of this shared resource. The Lake Whatcom Management Program (LWMP) brings together local agencies, including the City of Bellingham, Whatcom County, and Lake Whatcom Water and Sewer District, who work with organizations and the community to promote stewardship and take cooperative action to restore water quality, protect environmental health, and preserve healthy forests in the watershed.

Recognizing the critical role Lake Whatcom plays in the region, the LWMP has established a comprehensive framework for action. This framework, outlined in five-year work plans, guides the collaborative efforts of local governments, organizations, and the community to achieve tangible improvements in the lake's health. Progress reports are created annually to showcase the specific actions taken and the measurable results achieved in our shared commitment to protecting this vital resource.

We are proud to present this annual progress report for 2025, highlighting achievements from the first year of the current work plan. This report reflects our commitment to transparency and accountability and demonstrates the steady, measurable steps being taken to protect our shared drinking water source. Together, through partnership and community stewardship, we will continue advancing solutions that ensure Lake Whatcom remains clean, resilient, and healthy for generations to come.



*March Morning on Lake Whatcom, Photo by Richard Binder*

## Phosphorus and Lake Whatcom



*Sampling on Lake Whatcom, Luke Hollister, WWU*

Lake Whatcom's water quality is closely tied to the condition of the surrounding landscape. Runoff from developed areas enters Lake Whatcom, changing water chemistry and disrupting the natural balance of the ecosystem. One pollutant of particular concern is phosphorus, which is a naturally occurring nutrient necessary for animal and plant life. However, too much phosphorus from human activities has caused a decline in the lake's water quality, including a significant decrease in dissolved oxygen deep in the water column as well as seasonal algal blooms on the surface. These impacts threaten the health of aquatic species and can affect the drinking water treatment process.

Excess phosphorus is primarily transported to Lake Whatcom through stormwater runoff from erosion, fertilizer and pesticide use, deforestation, organic material, animal waste, and phosphorus-based soaps and detergents. Since the early 1990s, the LWMP has been working to reduce excess phosphorus in the lake by:

- Adopting land use and stormwater regulations to reduce phosphorus loading
- Constructing, operating, and maintaining stormwater treatment facilities and sewage conveyance and collection systems
- Implementing residential stormwater retrofit programs to reduce phosphorus loading from developed lots
- Purchasing and protecting land in the watershed that might otherwise be susceptible to development or deforestation

In 2016, the Environmental Protection Agency approved the [Lake Whatcom Total Maximum Daily Load \(TMDL\) study](#), which set in motion a 50-year cleanup plan for the City and County, focused on reducing phosphorus inputs to Lake Whatcom. Efforts to date have resulted in an annual reduction of over 200 pounds of phosphorus entering Lake Whatcom annually.

## 2025 Highlights

2025 was a pivotal year defined by action, coordination, and strong interagency collaboration. Progress was made across all 12 program areas, with the highlights below illustrating several key accomplishments from the past year. Together, these efforts demonstrate a continued commitment to protecting and restoring shared natural resources during the first year of the LWMP's current five-year work plan.



**Aquatic Invasive Species (AIS)**

The AIS Program strengthened invasive species protection efforts by:

- Adopting a Rapid Response Plan to ensure immediate action if invasive mussels are ever detected in the lake.
- Installing gates at Bloedel Donovan Park to prevent uninspected boats from entering the lake when staff are not present.
- Updating the risk-based permit fee structure, which generated additional revenue to support expanded inspection hours.
- Expanding monthly monitoring to detect invasive species earlier.



**Forest Management Plan**

The County and City launched the first-ever joint Forest Management Plan to guide forest management across more than 13,000 acres of City- and County-owned forestlands in the Lake Whatcom watershed.

- This plan utilized individual, stand-specific recommendations to protect forest health and water quality.
- A final draft of the plan was created in 2025 and is expected to be adopted in 2026.



**Land Acquisition Program**

The Lake Whatcom Land Acquisition and Preservation Program had its most successful year yet:

- The program invested \$11 million to purchase 16 properties, protecting an additional 1,056 acres of land in the watershed.
  - This includes securing the largest acquisition to date - a 754-acre former commercial forest.
- Dedicated crews to monitor and restore all 3,872 total acres protected through this program.

## Program Areas

As LWMP partners, the City of Bellingham, Whatcom County, and the Lake Whatcom Water and Sewer District lead the work described in this annual progress report. Additional partners play important roles to help achieve work plan goals. Key partners include Sudden Valley Community Association, Washington State Departments of Ecology and Natural Resources, Western Washington University's Institute for Watershed Studies, Whatcom Conservation District, and Whatcom Land Trust.

The work of the LWMP and its partners focuses efforts in 12 program areas. Below is a summary of the 12 program areas outlined in this progress report.

### 1. Land Preservation

Increase the amount of preserved and restored land to reduce development and other land disturbance to protect watershed health and fish and wildlife habitat.

### 2. Stormwater Management

Reduce the amount of phosphorus and bacteria entering the lake each year by using best management practices to collect, treat, and manage runoff from developed areas in the watershed.

### 3. Land Use

Prevent and minimize water quality impacts from new development and redevelopment.

### 4. Monitoring and Data

Collect and analyze sufficient data needed to protect water quality and reduce pollution in Lake Whatcom, reduce uncertainty in loading and response models, and guide management decisions.

### 5. Hazardous Materials

Prevent water quality impacts from improper storage and handling of hazardous materials and ensure that spill prevention and response programs adequately protect water quality.

### 6. Recreation

Provide access to recreational opportunities that are consistent with watershed health, water quality, and land management goals.

### 7. Aquatic Invasive Species

Prevent new aquatic invasive species (AIS) introductions to Lake Whatcom and reduce impacts associated with established invasive species.

### 8. Utilities & Transportation

Minimize water quality and quantity impacts from water, sewer, and transportation systems.

### 9. Education & Engagement

Increase awareness of Lake Whatcom challenges and protection efforts among watershed residents and visitors and promote engagement in behaviors that protect water quality.

### 10. Administration

Implement the LWMP 2025-2029 Work Plan and provide opportunities for public input.

### 11. Climate Action

Build climate resilience and adaptation within the Lake Whatcom watershed and Lake Whatcom Management Program.

### 12. Forest Management

Increase forest management strategies that improve forest health, protect lake water quality, and minimize the risk of catastrophic wildfire.

# Land Preservation

**Goal:** Increase the amount of preserved and restored land to reduce development and other land disturbance to protect watershed health and fish and wildlife habitat.

Preserving and maintaining undeveloped land within the Lake Whatcom watershed is one of the most effective long-term strategies for protecting drinking water quality and ensuring a sustainable water supply for future generations. By acquiring and restoring high priority properties, the LWMP reduces adverse effects of development, protects forests and riparian areas, and safeguards the ecological integrity of the watershed.

## Acquiring New Properties

The City's long-standing [Lake Whatcom Land Acquisition and Preservation Program](#) purchases properties from willing sellers in the watershed to prevent future development and restore natural conditions. Through this voluntary program, property owners can choose to sell to the City at fair market value to protect their land in perpetuity. Since its launch in 2001, the program has removed 940 potential development units from the watershed and protected 3,872 acres.

2025 was the most successful year to date, with 1,056 acres purchased across 16 properties for a total of \$11 million. The largest purchase occurred in February: a 754-acre forest parcel on the southeast side of Lake Whatcom. Previously managed by a timber company, the site has a mix of Douglas fir, hemlock, and cedar, along with several seasonal streams. This acquisition permanently protects a significant block of forest from future development and timber harvest.

## Protecting the Land

### Property Management Activities

Acquiring the land is only the first step. Ongoing stewardship ensures these lands continue to protect water quality and habitat over time. In 2025, a new field crew was established to increase capacity for protected property management in the watershed. This dedicated crew manages all 3,872 acres purchased through the program year-round, helping ensure the preserves thrive and can protect water quality and habitat into the future. Their work includes:

- Planting native vegetation
- Removing invasive species
- Mulching and maintaining planted sites
- Building and repairing fences, gates, and bridges
- Decommissioning unauthorized trails
- Removing trash, debris, and old structures
- Forest management
- Fire fuels reduction



*Crew planting at Agate Creek Preserve*



*Newly installed plants at Agate Creek Preserve*



*Repaired fence and sign at Olsen Creek Preserve*

Highlights from 2025 include planting 4,610 native plants throughout the watershed. To support the long-term success of the young plants, the crew also managed invasive plants across 61 acres using mechanical removal and, when necessary, selective herbicide treatments. They also carried out summer maintenance, mowing and clearing competing vegetation around young plants to improve survival.

The fall 2025 planting season began with installation of black cottonwood live stakes – cut branches that can be planted directly into the ground – at Agate Pond Preserve. The live stakes were sustainably harvested from Anderson Creek Preserve, where thinning dense cottonwood growth both improved the stand's health and provided plant material for restoration elsewhere.

# Land Preservation



## New Land Use Guidelines

In 2025, the City adopted a new resolution (Res. 2025-26) clarifying land management strategies and recreation guidelines for properties acquired through the program. The resolution will serve as a guide for City staff to respond to land use issues on City-owned property in the Lake Whatcom watershed going forward.

Recreation is already limited on these properties to prioritize water quality protection. While some parcels contain authorized trails, others are unsuitable for recreation infrastructure. Unauthorized trails can damage vegetation, cause erosion, and increase sediment delivery to Lake Whatcom and its tributaries, so staff monitor for and quickly address any such impacts.

To support responsible recreation, both the City and County partner with the Whatcom Mountain Bike Coalition (WMBC) to discourage unauthorized trail building and guide trail builders through appropriate processes.

Land management – particularly for forested properties – will be further guided by the joint City and County Lake Whatcom Forest Management Plan that was substantially completed in 2025. (See Program Area 12: Forest Management for more information.)

## Looking Ahead

Property acquisitions vary from year to year based on property availability, seller interest, and funding. The program is funded through watershed fees on City of Bellingham utility bills. Major purchases, such as the \$11 million spent in 2025, temporarily reduce available funding for future acquisitions. Because not all available properties can be purchased, staff prioritize acquisitions based on environmental benefit, location, and cost. Strategic prioritization will continue to guide decisions moving forward.

For property management, in addition to routine maintenance, the City field crew anticipates undertaking a major demolition project at Anderson Creek Preserve in 2026 to remove derelict buildings and restore the site with native vegetation.

## 2025 Highlighted Metrics

**1,056** new acres acquired

**35** development units removed

**3,872** cumulative acres in protected status and managed

**736** property owners contacted

**2025 expenditures: \$12,317,496**

# Stormwater Management

**Goal:** Reduce the amount of phosphorus and bacteria entering the lake each year by using best management practices to collect, treat, and manage runoff from developed areas in the watershed.

Stormwater management remains one of the most direct ways to protect Lake Whatcom’s water quality. Reducing phosphorus and bacteria pollution in the watershed helps the community meet the lake’s [Total Maximum Daily Load \(TMDL\) requirements](#). A TMDL is essentially a pollution “budget” set by state and federal agencies that defines the maximum amount of a pollutant that a waterbody can receive each day while remaining healthy. The LWMP invests significant time and resources into reducing pollution in the watershed to meet these requirements and protect the lake.

In 2025, the City of Bellingham and Whatcom County continued to make strong progress by constructing and upgrading stormwater treatment systems, supporting homeowners with native landscaping projects, improving data tracking, and strengthening coordination among the LWMP partners.



*Geneva Bioretention Facility along Austin Street. Photos 1 and 2 by Herrera Environmental Consultants, Photo 3 by Whatcom County.*

## Publicly-Owned Stormwater Treatment Systems (Capital Projects)

A major highlight of 2025 was substantial progress on several publicly owned stormwater treatment systems, often referred to as “capital projects” because of their significant design, construction, and long-term maintenance investments. These systems reduce the amount of phosphorus and other pollutants entering the lake.

One standout example is the County’s [Geneva Bioretention Facility](#), which is now considered a statewide model for innovation. The facility used a High Performance Bioretention Soil Mix (HPBSM) which is designed to trap phosphorus and other pollutants more effectively, including 6PPD-Q, the toxic tire dust that kills coho salmon. The site is being closely monitored by program partners, King County and the Washington State Department of Ecology, to evaluate its performance before HPBSM is installed at other locations across the state. Early results indicate that the Geneva Facility is effectively reducing phosphorus levels. A final report with detailed results is expected by the end of November 2026. This report will also evaluate the facility’s effectiveness in removing 6PPD-Q.

The City also reached near completion on the [Donald Avenue Water Quality Retrofit Project](#), which will be fully operational in early 2026. This project uses the City’s high-performance Phosphorus Optimized Stormwater Treatment (POST) technology to remove excess phosphorus and other pollutants from surrounding development before stormwater reaches the lake.

In addition, the City continued design work on the [Lake Whatcom Vault Retrofit Project](#). This project will retrofit three aging stormwater treatment facilities with more effective treatment technology and make upgrades that reduce long-term maintenance needs.

# Stormwater Management



## Residential Stormwater Improvement Projects

In 2025, homeowners in the Lake Whatcom watershed continued to make voluntary water quality improvements to their property through the City's [Homeowner Incentive Program](#) (HIP) and County's [Neighborhood Native Landscaping Program](#) (NNLP). Lake Whatcom and its watershed significantly benefit from these two complementary programs that help homeowners reduce stormwater impacts while improving water quality and habitat on their properties.

- Twelve properties participated in HIP through voluntary installations in 2025. The City reimbursed HIP participants for 1,711 native plants and 195 cubic yards of mulch for their projects, which covered 30,000 square feet. Four additional HIP projects were completed due to code requirements, increasing the total coverage to over 80,000 square feet. Updates to the City's HIP data also improved tracking and coordination with capital facilities, ensuring that voluntary projects complement broader infrastructure efforts.
- Eleven properties participated in the NNLP, totaling over 23,000 square feet of added native landscaping. Fall planting parties brought together homeowners, staff, and volunteers to install 1,732 native plants and 326 cubic yards of mulch, enhancing habitat, controlling runoff, and strengthening neighborhood stewardship. The program also launched a 6,500 square foot demonstration garden at the Sudden Valley Welcome Center on the shore of Lake Louise to showcase native landscaping techniques and promote community learning.



*The "before," "during," and "after" of the Sudden Valley Welcome Center's 6,500-square-foot demonstration garden.*

## Subwatershed Master Plan

In 2025, Whatcom County launched its second Subwatershed Master Plan for Lake Whatcom, focusing on the West Geneva and North Lake Whatcom watershed areas and building on the successful East Geneva plan completed in 2021.

A Subwatershed Master Plan provides a targeted, data-driven roadmap for identifying drainage issues, addressing flooding and water quality concerns, and prioritizing stormwater infrastructure improvements within a specific portion of the watershed.

Throughout the year, staff conducted field assessments and gathered technical data to pinpoint areas needing upgrades, and a consultant contract was awarded in the fall to advance the work. Funded by the Lake Whatcom Stormwater Utility and supported by a \$180,000 Department of Ecology grant, this effort strengthens long-term planning and ensures stormwater is managed safely and effectively at a subwatershed scale.

# Stormwater Management

## 2025 Highlighted Metrics

~10 pounds of phosphorus newly reduced through treatment and flow control capital projects

36 of 45 total outfalls served by best available treatment

27 properties improved through NNLP, HIP and code-required projects in the City

Over 3,400 native plants installed through County and City programs

2025 expenditures: \$3,056,927



*Completed Donald Avenue Water Quality Retrofit Project*

## Looking Ahead

Stormwater infrastructure in the Lake Whatcom watershed is becoming more modern and more comprehensive. In 2026, the focus will include bringing new capital retrofit projects online and ensuring adequate maintenance capacity as facilities expand.

Furthermore, the City is working on an enhanced maintenance plan to be approved by the Department of Ecology. This plan shows how the City can increase maintenance frequency and activities to reduce pollution to the lake, at or below the cost of building capital facilities. LWMP staff will meet with maintenance staff in 2026 to determine which enhanced maintenance activities to prioritize first.



# Land Use

**Goal:** Prevent and minimize water quality impacts from new development and redevelopment.

Land use regulation is an important tool for protecting Lake Whatcom's water quality. In 2025, both the City of Bellingham and Whatcom County continued implementing land use codes designed specifically to protect water quality and quantity in the watershed, including [Bellingham Municipal Code 16.80](#) and [Whatcom County Code 20.51](#).

The year reflects steady progress. Development activity continues in the watershed, but it is being carefully reviewed, conditioned, and inspected to ensure compliance with stormwater, vegetation retention, and erosion control requirements. Staff also continue to track watershed development trends to inform long-term planning through the publicly accessible [Buildout Report](#) which is updated every five years.

Beyond day-to-day permitting and compliance work, the City and County continued discussions about harmonizing their respective land use regulations which is an important step toward greater consistency and predictability across jurisdictions.



## 2025 Highlighted Metrics

**1.15** acres of phosphorus-neutral properties developed in accordance with land use regulations

**36,155** square feet of developed surface treated by Best Management Practices

**13,939** square feet of newly established Native Vegetation Protection Areas within City limits

2025 expenditures: **\$225,850**

## Looking Ahead

In 2026 and beyond, staff will continue to coordinate between jurisdictions to align land use regulations where practicable, track development trends and activities, monitor newly established Native Vegetation Protection Areas (NVPA) within City limits, and strengthen outreach so residents better understand seasonal construction windows and special watershed regulations.

# Monitoring and Data

**Goal:** Collect and analyze sufficient data needed to protect water quality and reduce pollution in Lake Whatcom, reduce uncertainty in loading and response models, and guide management decisions.

Understanding the health of Lake Whatcom and the effectiveness of management strategies requires ongoing monitoring and data collection. This effort tracks water quality trends, assesses the effectiveness of management strategies, and provides crucial information for informed decision-making. The Lake Whatcom Data Management Team – with representatives from the City, County, Lake Whatcom Water and Sewer District, Department of Ecology, and Western Washington University (WWU) – meets regularly to coordinate these monitoring efforts and ensure a comprehensive and unified approach.



*Collecting lake water quality samples*

## Water Quality Monitoring

The team's work encompasses a wide range of activities, from routine water quality monitoring to specialized studies and assessments. One of the longest-running efforts is the City's contract with [WWU's Institute for Watershed Studies \(IWS\)](#) to conduct routine monitoring of Lake Whatcom and its 12 tributaries. IWS collects long-term water quality data on various parameters, including temperature, pH, dissolved oxygen, chlorophyll, nutrients, total organic carbon, algae, sulfide, and E.coli. IWS also assesses streamflow from Smith and Austin Creeks, two tributaries of Lake Whatcom.

There were 1,194 water quality samples collected from Lake Whatcom in 2025. The majority of these samples were collected by IWS; however, the City also collects three bacteria samples per month from the lake, as required by law. IWS also collected 129 water quality samples from Lake Whatcom's tributary streams.

Water quality samples collected by IWS in 2025 do not show major changes compared with 2024. However, IWS continues to monitor long-term trends to understand how conditions shift over time. Overall, results indicate slow but steady improvement. Some indicators, such as phosphorus, temperature, and dissolved oxygen, have remained mostly stable. Dissolved nitrogen in the lake continues to decrease. As for tributaries, urbanized streams tend to fail more indicators than forested ones.

One encouraging finding is that chlorophyll levels are at the lowest they have been in decades. Chlorophyll is used to estimate the amount of algae in the water. When algae die and decompose, they consume oxygen, which reduces dissolved oxygen levels in the lake. Lower chlorophyll, and therefore lower algae biomass, is beneficial for overall oxygen conditions in the lake.

All annual Lake Whatcom monitoring reports are available through [WWU's CEDAR site](#).

## Other Monitoring

The City also gathers data from rain gauge monitors and weather stations, along with streamflow information monitored by the United States Geological Survey (USGS). The USGS collects hydrology data for eight Lake Whatcom tributaries as well as the Middle Fork of the Nooksack River.

Current water level, rainfall, and weather data for Lake Whatcom is available to the public through an online dashboard on the [City's website](#).

# Monitoring and Data

## Stormwater System Effectiveness

The City and County continue to collect stormwater samples to evaluate how well constructed stormwater treatment systems are performing and to identify major sources of contaminants in Lake Whatcom’s primary tributaries. These systems are designed to reduce pollution in residential stormwater runoff, especially phosphorus, because Lake Whatcom has been found to contain excess phosphorus.



*Collecting tributary water quality samples*

### 2025 Highlighted Metrics

**1,194** lake water quality samples collected

**129** tributary water samples collected

**169** stormwater samples collected

**133+** pounds of phosphorus removed by stormwater facilities

**2025 expenditures: \$462,153**



*Collecting storm drain samples*

## Looking Ahead

The Data Team continues to assess and plan for future data requirements and studies, including data needed to further refine predictive water quality models. The Lake Whatcom TMDL Reassessment is under review by the Washington State Department of Ecology in 2026. This study updates watershed and lake models using newer data and improved tools to result in more accurate predictions about water quality, phosphorus loading, and hydrology. The Data Team will respond to Ecology’s review as updates are available.

# Hazardous Materials

**Goal:** Prevent water quality impacts from improper storage and handling of hazardous materials and ensure that spill prevention and response programs adequately protect water quality.

Protecting Lake Whatcom from hazardous materials requires a coordinated effort between local agencies and the community. Whatcom County, the City of Bellingham, and the Lake Whatcom Water and Sewer District focus on responding quickly to spills and working closely with residents and businesses to stop pollution before it starts. Trained field staff remain prepared to take immediate action, ensuring the continued protection of our drinking water.

## Incident Response

Response teams managed a successful year in 2025, addressing 10 reported incidents of illicit discharges or potential pollution within the Lake Whatcom watershed (3 within City limits and 7 in the County). These calls typically involved fuel or oil on roadways following vehicle accidents or minor issues with water and sewer infrastructure.

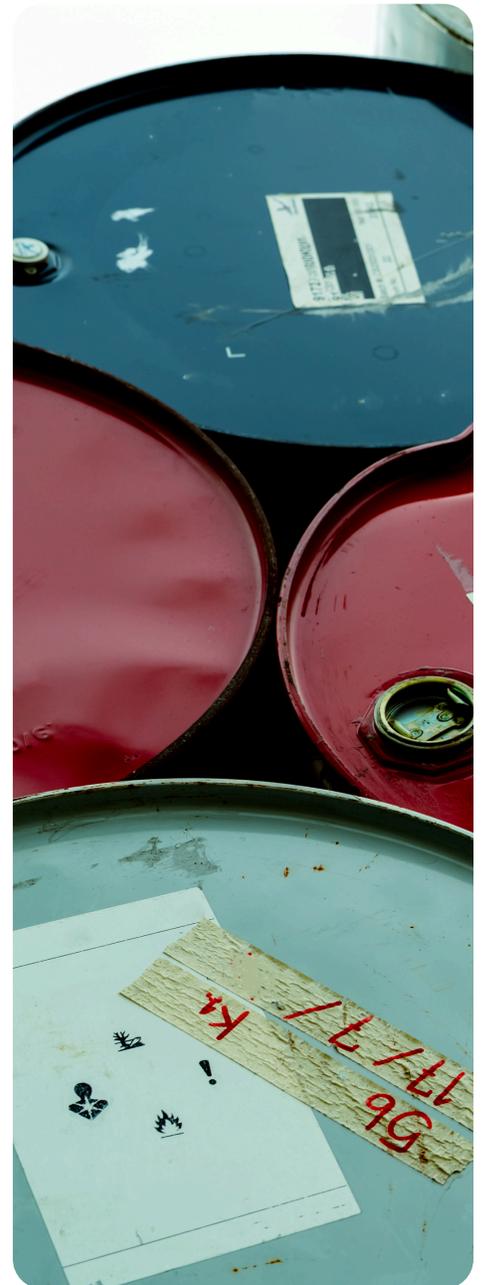
Due to rapid containment and cleanup efforts, no reported incidents resulted in discharges to the lake this year.



## Staff Training and Preparedness

To maintain high response standards, the program prioritizes ongoing education for front-line personnel. In 2025, twenty City staff members completed specialized training in spill prevention and response. This builds on a long-standing commitment to safety. Since data tracking began, City staff have completed over 250 training sessions, ensuring the team has the technical skills necessary to handle emergencies effectively and safely.

County staff at the Health Department serve as the primary responders for spills in the Lake Whatcom watershed. Additionally, Public Works Stormwater and Maintenance & Operations teams undergo regular spill response training. In 2025, 30 regular and temporary employees completed this training. In 2026, spill response training will be available to all County staff through the County's intra-web training with specific employee tracking capabilities.



# Hazardous Materials

## Pollution Prevention Assistance (PPA)

Providing local businesses with technical guidance serves as a primary defense for lake protection. The City and County’s PPA Program provides free assistance and advice to help business owners reduce or eliminate dangerous waste. By evaluating how businesses handle potential pollutants, this program prevents hazardous materials from entering the air, wastewater, or stormwater systems. When staff identify a potential risk, they refer businesses to this program for supportive, hands-on help.



*Example of illicit discharge addressed by the PPA program*



*Whatcom County’s Household Hazardous Waste flyer*

## Outreach and Education

Building on the success of the Household Hazardous Waste Pilot Program, outreach efforts continued throughout 2025. The program translated the data gathered from our watershed residents into action by:

- Hosting in-person events to answer questions about safe chemical storage.
- Partnering with homeowner associations and realtors to get disposal guides into the hands of new and long-term residents.
- Sharing digital resources that make it easy for everyone to know exactly where and how to dispose of old paint, cleaners, and automotive fluids.

These strategies empower neighbors to play an active role in keeping our watershed healthy and our drinking water safe.

## 2025 Highlighted Metrics

**10** incident responses

**50** new staff trained in spill response

**No** illicit discharges into Lake Whatcom

**2025 expenditures: \$25,524**

# Recreation

**Goal:** Provide access to recreational opportunities that are consistent with watershed health, water quality, and land management goals.

Managing parks and trails is about more than providing recreational space; it is a vital component of maintaining clean drinking water. In 2025, the City of Bellingham and Whatcom County Parks and Recreation Departments expanded their teams and efforts to ensure that recreation and water quality protection remain integrated. By employing sustainable land-care and waste management practices, these departments ensure the watershed remains protected for the 750,000 visitors who enjoy our parks annually.

## Investing in the Land: New Field Crews

The most significant highlight of 2025 was the growth of our professional teams dedicated to watershed health:

- The City hired a new, full-time field crew specifically to protect land acquired for water quality. This team is already making a difference by decommissioning unauthorized trails and installing educational signage.
- The County recently welcomed a new Land Management Supervisor. Supported by three year-round and two seasonal staff, the subdivision focuses on trails and conservation and restoration projects, while emphasizing responsible erosion and sediment control practices.

## Bloedel Donovan Park

Bloedel Donovan Park remains one of the community's favorite summer destinations. Following major facility upgrades in 2024, including park-wide electrification and new EV charging stations, the park continues to serve as a model for modern, sustainable recreation. In 2025, the outdated playground in the park was replaced with a brand new one with accessibility features. A sewer line was also repaired to prevent leaks into the surrounding area. Park staff provide a consistent on-site presence, helping visitors understand park rules, encouraging responsible pet ownership, and coordinating closely with the AIS Program to keep our waters safe. Together, AIS and Parks staff interacted with 1,161 visitors about minimizing boat impacts to Lake Whatcom while maintaining access to the lake.



*Staff with tree used to build a bridge at the Stimpson Nature Preserve*



*Photo by Dennis McClintok*



*Photo by Rebecca Greenwood*

# Recreation

## Watershed Health by the Numbers

The City and County regularly monitor how our park infrastructure affects the environment. In 2025, staff tracked several key metrics to measure our progress:

- **Pet Waste Management:** Staff maintained 34 dedicated pet waste stations to help keep harmful bacteria out of our local streams and lakes.
- **Sustainable Maintenance:** For the first time, the City and County reported on the use of Integrated Pest Management (IPM). The City managed nearly 65 acres of recreational land using these environmentally friendly strategies that reduce the need for chemicals.
- **Stormwater Protection:** Staff ensure that our parking lots and facilities do not create runoff issues. Currently, 4.7 acres of impervious surfaces across City and County parks are managed with Best Management Practices (BMPs) to filter water before it reaches the lake.

## Trail Maintenance and Restoration

While trail systems offer incredible views and exercise, they require regular care to prevent erosion. In 2025, crews maintained over 26 miles of trails with a specific focus on water quality.

A remaining significant challenge is the construction of unauthorized, "user-built" trails and the use of motorized vehicles in protected areas. These activities can cause significant soil erosion and damage sensitive habitats.

To combat this, the City:

- Decommissioned 0.75 miles of unauthorized trails.
- Built new fences and gates to block motorized vehicle access.
- Deployed trail cameras to monitor and discourage prohibited activity in sensitive areas.

To support responsible recreation, both the City and County partner with the Whatcom Mountain Bike Coalition (WMBC) to discourage unauthorized trail building and guide trail builders through appropriate processes.

## 2025 Highlighted Metrics

**753,237** visitors enjoyed parks and trails in the watershed

**26.44** miles of trail maintained

**2025 expenditures: \$926,700**



*Golden Trails, Photo by Mark Roberts*



*Staff maintaining the Hertz Trail*

# Aquatic Invasive Species

**Goal:** Prevent new aquatic invasive species (AIS) introductions to Lake Whatcom and reduce impacts associated with established invasive species.

Preventing the introduction and spread of aquatic invasive species (AIS) is one of the most important ways to protect the health of Lake Whatcom and Lake Samish. Invasive species can disrupt food webs, outcompete native wildlife, and damage critical water treatment infrastructure that delivers drinking water to more than 120,000 residents. To address these risks, the AIS Program leads a comprehensive prevention strategy that uses watercraft inspections, lake monitoring, enforcement, and community education. The program's long-term goal is to ensure Lake Whatcom continues to provide clean, safe, and cost-effective drinking water for years to come.



*Zebra and quagga mussels*

2025 was a significant year for the AIS Program, with several major updates that strengthen local protection efforts as lake visitation increases and invasive species detections move closer to Whatcom County.

## Boat Inspection Program

The boat inspection program remains the primary defense against the introduction of invasive species. In 2025, staff performed 15,572 inspections and issued 7,127 permits. This included 2,930 local permits, 740 Washington State permits, 55 out-of-state permits, and 3,282 non-motorized permits.

A major milestone occurred in June 2025, when the AIS Program intercepted its first-ever vessel fully encrusted with invasive mussels. The pontoon boat had traveled from Ohio, bypassing several highway check-stations before arriving in Bellingham. Although the mussels were dead, the team performed a four-hour decontamination using 400 gallons of high-temperature water. This successful interception prevented biological material from entering the lake, which could have caused false positives during future water quality monitoring. This incident highlights the ongoing threat to local drinking water supplies and reinforces the importance of AIS safeguards.



*Zebra and quagga mussels on pontoon*



*Decontaminating mussel-fouled pontoon*

## Risk-Based Rate Structure

AIS permit fees increased in March 2025 for the first time since 2019, and a new rate structure was adopted to reflect the greater risk posed by boats that travel from farther distances to visit Whatcom County lakes. For example, permits for boats residing outside of Whatcom County and the state cost more than permits for locally kept boats. This change generated an additional \$65,000 in revenue this season, all of which stays within the program to support extended inspection hours and the specialized equipment needed to address growing risks.



*Crew performing a new permit inspection*

# Aquatic Invasive Species

## Additional Off-Season Coverage

In 2025, the AIS Program expanded off-season protections to provide more consistent year-round coverage. In the fall, new inspection gates were installed at the Bloedel Donovan Park boat launch – the county’s busiest launch – to help prevent uninspected boats from entering Lake Whatcom during periods when seasonal AIS staff are not on site, primarily between mid-October and late April.

During the off-season, boaters must now call a dedicated hotline for a remote, staff-assisted inspection. Trained AIS staff guide boaters through verbal steps to verify the boat has a valid permit and is clean, drained, and dry. Staff also ask about the boat’s most recent launch location. If more information is needed or the boat presents a higher risk, staff meet the boater in person for an on-site inspection.

In the first three months after installation, the gates facilitated 104 off-season inspections when seasonal staff were not present. Cameras were also added at the Bloedel Donovan Park and South Bay launches in 2025 to improve monitoring during the off-season.



*Launch station gates at Bloedel Donovan Park*



*Staff performing eDNA testing at South Bay launch*



*Staff monitoring Asian clam density at North Lake Whatcom*

## Expansion of Targeted Monitoring

Monitoring techniques continue to evolve to catch potential threats as early as possible. In 2025, the AIS Program added environmental DNA (eDNA) sampling to its monthly monitoring toolkit. This high-tech tool can detect invasive species at their earliest life stages, before they have the chance to reproduce.

Throughout the season, the AIS team conducted 15 plankton tows at Bloedel Donovan, Sudden Valley, South Bay, and Lake Samish between May and November. An additional 20 eDNA samples were collected at the same sites between June and October.

All tests returned negative results for zebra, quagga, and golden mussels, confirming that prevention efforts remain effective and that the lakes continue to be free of these invasive species.

## Enforcement

The Whatcom County Sheriff’s Office (WCSO) remains a key partner, patrolling both Lake Whatcom and Lake Samish to ensure compliance with AIS regulations and boater safety laws. Despite their efforts, enforcement across such large water bodies remains challenging. The AIS Program continues to explore ways to strengthen patrol efficiency and ensure all boaters visit inspection stations before launching. The installation of cameras and inspection gates at high-use boat launches in 2025 further reduces the risk of uninspected or unpermitted boats entering the lakes.

# Aquatic Invasive Species

## Prepared to Respond to Invasive Mussels

Although invasive freshwater mussels—such as quagga, zebra, and golden mussels—have not been detected in Lake Whatcom, the LWMP is prepared to respond quickly if they ever are. In collaboration with local, state, and tribal partners, the City developed the [Lake Whatcom Invasive Freshwater Mussel Rapid Response Plan](#) in 2025 – the first such plan to be initiated by a local government in Washington state. This plan outlines coordinated action steps to support a swift and effective response and was developed with the same consultant that wrote Washington State’s Invasive Mussel and Northern Pike Rapid Response Plans.

If invasive mussels are detected in Lake Whatcom, this plan enables responding agencies to initiate containment and control actions within 48 hours. A trained incident command team—staffed by experts from the Washington Department of Fish and Wildlife and the Lake Whatcom Management Program—will lead the response. All response options will be carefully reviewed for their effectiveness, cost, environmental safety, and compliance with applicable regulations.

## Education and Outreach

The AIS Program works to empower boaters to become active stewards of our lakes. The [Whatcom Boat Inspections website](#) provides easy access to fee information, inspection locations, and the AIS Awareness Course, which teaches boaters how to prevent the spread of invasive species and offers a permit discount upon completion. By promoting "Clean, Drain, Dry" practices, the AIS Program helps protect Lake Whatcom as a source of clean, safe, and cost-effective drinking water for generations to come.



Staff educating boater during an inspection



Staff promoting responsible boating practices

## 2025 Highlighted Metrics

**15,572** boats inspected

**5** decontaminations performed

**31** sheriff patrols performed on Lakes Samish and Whatcom

**3,571** people completed the online AIS Awareness Course

**0** known invasive species introductions in Lake Whatcom

2025 expenditures: **\$1,082,675**

# Utilities and Transportation

**Goal:** Minimize water quality and quantity impacts from water, sewer, and transportation systems.

Effective management of utilities and transportation infrastructure within the Lake Whatcom is essential to protecting water quality and ensuring reliable community services. The Utilities and Transportation Program Area supports this work by maintaining sustainable utility systems, advancing water conservation, and reducing the environmental impacts of transportation infrastructure.

## Water Conservation

The City and Lake Whatcom Water and Sewer District (District) continued to monitor water use in 2025, with demand typically peaking during the summer months. To reduce stresses on water supply and promote responsible water use, both agencies implemented water conservation actions outlined in their Water Use Efficiency Plans. The City adopted a new [10-year plan](#) in March 2025.

To support residential water efficiency, the City offered rebates for high-efficiency toilets, washing machines, and irrigation controllers. Fourteen rebates issued in 2025 are estimated to save 377,250 gallons of water annually. The District, through its partnership with the Whatcom Water Alliance (WWA), issued seven additional rebates.

Water-saving practices – such as letting lawns go dormant, detecting and repairing leaks, and following the voluntary outdoor watering schedule – were promoted through events, social media, utility bill inserts, and other outreach. The City and District continued active participation in the WWA to support countywide coordination on water conservation.

## Water System Plan Update

The City also advanced its comprehensive [Water System Plan update](#), which assesses current conditions and future needs of the water system. The plan will guide system maintenance and improvements over the next 10 years while supporting long-term, 20-year planning. A draft was submitted to the Departments of Health and Ecology for review in 2025.

## Water School

The City's [Water School program](#) continued to serve local students, with 858 fifth graders and accompanying adults participating in 2025. The program reached all Bellingham public elementary schools as well as students within the District. Water School provides hands-on education about Lake Whatcom, watershed protection, stormwater pollution prevention, and the City's water and wastewater treatment systems.



*City of Bellingham staff posting annual voluntary watering schedule signs*



*Students building a filter during Water School*



*City of Bellingham Water Treatment Plant (WTP)*



*Water School students touring the WTP*

# Utilities and Transportation



*Repair of ruptured pipeline at Camp Firwood*

## Sanitary Sewer System Maintenance

The City and District maintain sanitary sewer infrastructure throughout the watershed by replacing aging components, following capital improvement plans that minimize overflow risks, and identifying and repairing leaks. In 2025, City crews completed 585 work orders, including inspections and cleaning of sewer mains, manholes, and lift stations.

The District completed several key projects, including installation of a pipeline spanning Beaver Creek in Sudden Valley. This project improves system resilience by allowing sewage flows to be quickly diverted between two major pipelines in the event of an outage, reducing the risk of spills.

The District also finished the final phase of a multi-year rehabilitation of priority sections of the Lake Whatcom Boulevard sewer interceptor. Using cured-in-place pipe technology, crews cleared buildup and relined the interceptor, restoring capacity and reducing the likelihood of future overflows.



*Installation of sewer pipeline over Beaver Creek in Sudden Valley*

## Addressing Sewer Overflows

Despite ongoing maintenance efforts, sewer overflows occasionally occur. Three overflows were reported in the watershed in 2025. One reached the lake in July due to a force main rupture at the District's Camp Firwood lift station. Approximately 885 gallons entered the lake after being contained by a retaining wall and directed through a stormwater catch basin. District crews arrived within 30 minutes and remained on site through cleanup and repair. Water quality testing by [Whatcom County Health and Community Services \(WCHCS\)](#) showed very low levels of E. coli in the flow that entered the lake.

## Residential Septic System Enforcement, Maintenance, and Education

As of 2025, there are 791 septic systems recorded in the watershed. WCHCS supports homeowners in maintaining these systems through free training workshops, which make participants eligible for maintenance rebates. Twelve rebates were issued to watershed homeowners in 2024, with 62 provided between 2020 and 2025.

WCHCS also enforces required evaluations and ongoing maintenance. In 2025, average monthly compliance was 69 percent. Of the systems evaluated throughout the year, 326 (79 percent) were in satisfactory condition, 82 (20 percent) required maintenance, and three (1 percent) failed inspection. All three failing systems were replaced to meet requirements. In 2025, 248 property owners received informational materials on septic systems through mailings in the Lake Whatcom watershed.

# Utilities and Transportation

## Road Maintenance

The City and County continued enhanced road maintenance in the watershed, including street sweeping and catch basin cleaning to reduce pollutant transport to the lake. In 2025, the City inspected 523 of its 590 catch basins; four required cleaning and two were repaired. The County inspected 892 of 904 catch basins; 345 required cleaning and 17 required repairs. Through street sweeping efforts, approximately 40 pounds of phosphorus were removed.

Both jurisdictions also incorporate stormwater best management practices and bike and pedestrian mobility improvements into road design standards to further reduce water quality impacts.



*City street sweeper*



*Clearing clogged storm drain*

### 2025 Highlighted Metrics

**377,250** gallons of water conserved

**21** households participated in residential rebate programs

**69%** average monthly compliance rate of on-site sewage or septic systems

**79%** OSS were satisfactory, **20%** needed maintenance, and **1%** failed and were replaced over the course of the year

**3** sewer overflows in the watershed

**39.88** pounds of phosphorus removed from street sweeping

**349** catch basins cleaned, **1,415** inspected

2025 expenditures: **\$1,318,956**

## Looking Ahead

The City is developing an enhanced maintenance plan for review by the Department of Ecology. The plan outlines strategies to increase maintenance frequency and effectiveness while controlling costs compared to capital construction. LWMP and maintenance staff will work together in 2026 to identify priority actions for implementation.

In addition, the City anticipates a public hearing and City Council approval of the updated Water System Plan in 2026.

# Education and Engagement

**Goal:** Increase awareness of Lake Whatcom challenges and protection efforts among watershed residents and visitors and promote engagement in behaviors that protect water quality.

The LWMP remains dedicated to protecting our water resources by empowering community members with the knowledge and tools they need to take action. In 2025, the program focused on a multi-tiered approach: providing broad watershed information to the general public, offering focused incentives to encourage conservation practices and maintaining community-wide programs that benefit the lake indirectly.

## General Lake Whatcom Outreach

The LWMP continues to serve as the primary source of information for watershed residents and visitors. By utilizing a mix of digital platforms and traditional mailings, the program ensures that residents stay informed about watershed health and management activities.

- **Informational Mailings:** In 2025, the program distributed 7,629 informational items. This included mailing 641 copies of the [Stewards of the Lake guide](#) to new homeowners across the watershed to welcome them and introduce best practices for lakeside living. Additionally, the annual Lake Whatcom newsletter reached 5,694 addresses within the Lake Whatcom Stormwater Utility (LWSU).
- **Digital Engagement:** The LWMP website remains a vital hub for resources and updates. In 2025, the site saw 9,500 unique active users.
- **Advertising:** The LWMP promoted information about Lake Whatcom programs and protection efforts through paid advertising on Whatcom Transportation Authority (WTA) buses, at the Pickford Film Center, through bill inserts sent to all Bellingham utility customers, and in the Sudden Valley Views, Adventures Northwest magazine, and Bellingham Playbook.

## Community-Wide Outreach

The LWMP implements community-wide programs designed to address specific environmental impacts while building a foundation for lifelong watershed stewardship.

### Pet Waste

- The [City](#) and [County](#) both have long-standing community-wide pet waste outreach programs that encourage community members to commit to picking up dog poop at home and on walks through an online pledge. The pledge is promoted at in-person events and online through advertising, social media, and an annual dog photo contest. People who participate in the program receive free tools that help make picking up dog poop easier.
- The County also has a Scooping Ambassador Program that empowers community volunteers to promote responsible disposal habits. By utilizing diverse outreach methods, ranging from neighborhood conversations and social media advocacy to the strategic placement of yard signs, ambassadors help reduce raw and bagged pet waste in yards, trails, and waterways. This peer-to-peer model effectively increases local awareness while providing residents with the tools needed to dispose of pet waste appropriately. The City will begin partnering with the County on this program in 2026.

### Youth Education

Investing in the next generation is essential for long-term watershed stewardship. The LWMP continues to prioritize youth education through hands-on learning and site visits. In 2025, 842 fifth-grade students participated in the City's Water School program, learning about water treatment and conservation principles.



"Toss the Turd" game at City pet waste booth

# Education and Engagement

## Program-Specific Outreach

To move beyond awareness and toward action, the LWMP provides direct outreach tailored to specific program goals. Some examples are below.

- **Land Preservation:** To encourage participation in conservation efforts, the City sent 736 letters to property owners, seeking interested sellers for the land acquisition program.
- **Homeowner Incentive Program (HIP):** Outreach for the HIP remained active to encourage residents to convert traditional lawns into water-quality-friendly landscapes. This year’s efforts included distributing door hangers and brochures and sending mailers. 434 individual mailers were sent to eligible properties that have not yet participated in the program.
- **Phosphorus-Free Lawn Care:** Staff created phosphorus-free fertilizer signs and brochures that they distributed to five local garden retail stores for them to display. These materials remind Lake Whatcom watershed residents buying lawn care supplies that no phosphorus fertilizers, mulch, or soil amendments are allowed in the watershed. Staff will be reaching out to additional retailers in 2026.
- **Lake Whatcom Forest Management Plan (LWFMP):** Outreach staff supported the development of the LWFMP with robust public engagement, including in-person meetings, online surveys, forest tours, a 12-minute educational video, and more. More than 150 people provided comments on the plan and the online video was viewed more than 600 times. These efforts help community members understand the intersection of forest health, climate changes, and water quality.



Zero-phosphorus lawn care signs in local retailers



Pet waste pop-up at Lake Whatcom Park

## 2025 Highlighted Metrics

**842** students participated in the Water School Program

**9,500** unique visitors to the LWMP website

**583** We Scoop pledges taken  
**85** Pet Waste ambassadors

2025 expenditures: **\$212,774**

# Administration

**Goal:** Implement the LWMP 2025-2029 Work Plan and provide opportunities for public input.

In 2025, the Lake Whatcom Management Program reached a pivotal milestone with the adoption of its five-year work plan (2025 – 2029). The work plan not only solidifies our shared direction, but also formally launches two long-anticipated program areas: forest management and climate action. These additions represent a meaningful expansion of our work and position us to address watershed protection more holistically in the face of changing environmental conditions.



### 2025 Highlighted Metrics

**33** formal meetings across policy, technical, and public engagement topics

2025 expenditures: **\$234,372**

### New Staff, New Perspectives

A key factor in this progress has been the addition of new staff who have brought fresh perspective, energy, and leadership to the program. Their ability to step back, assess longstanding processes, and spearhead new initiatives has strengthened our internal capacity. This infusion of new thinking has complemented the institutional knowledge of long-standing team members, resulting in a more dynamic and forward-looking program overall.

Staff from the City of Bellingham, Lake Whatcom Water and Sewer District, and Whatcom County remain deeply committed to coordinating efforts and amplifying one another’s work in service of Lake Whatcom. More than 20 staff members across the three jurisdictions regularly participate in meetings, develop agendas, communicate outcomes, and advance the Lake Whatcom Management Program Work Plan.

### Looking Ahead

Throughout 2025 and into 2026, we also made significant strides in refining how and when we bring policy topics to the Lake Whatcom Policy Group. By focusing on issues that align with members’ interests and decision-making roles, we have fostered more meaningful dialogue and engagement. This shift reflects a deliberate effort to listen carefully, prioritize transparency, and use our collective time effectively. The strengthened foundation built this year sets us up well for continued collaboration and thoughtful decision-making in 2026.

# Climate Action

**Goal:** Build climate resilience and adaptation within the Lake Whatcom watershed and Lake Whatcom Management Program.

In 2025, the LWMP officially launched its Climate Action program area, marking a significant milestone in the long-term protection of the watershed. This new focus acknowledges that a changing climate directly impacts the lake’s water quality and the health of the surrounding ecosystem.

## Launching the Climate Vulnerability Assessment (CVA)

Staff dedicated 2025 to scoping, orientation, and development of a Request for Proposals (RFP) for the Lake Whatcom CVA issued in 2025. This assessment will serve as technical assessment to understanding how climate change affects the watershed and the LWMP’s ongoing watershed management work.

Specific objectives of the assessment include:

- Assessing and evaluating potential changes to source water quality for the City municipal water supply, Lake Whatcom Water and Sewer District, and other direct users of Lake Whatcom as a drinking water source due to climate change
- Evaluate climate vulnerability of utility assets associated with maintaining safe, reliable drinking water
- Assess the Lake Whatcom watershed’s vulnerabilities to climate change, as it relates to maintaining water quality in Lake Whatcom and meeting the requirements of the TMDL
- Provide recommendations for priority actions and adaptation approaches that would incorporate climate resilience into the current or future Lake Whatcom Management Program work plans under future climate conditions
- Develop communications and outreach materials to support the results of the climate vulnerability assessment



A climate vulnerability assessment is critical for guiding proactive stewardship, helping ensure that Lake Whatcom remains a resilient resource for both the ecosystems and communities that rely on it.

## Water Systems Resilience Planning

The City of Bellingham, Whatcom County, and the Lake Whatcom Water and Sewer District scoped the work to also support the City of Bellingham Water System Plan to comply with Washington Department of Health Climate Resilience requirements under [RCW 43.20.310](#). Technical analysis of acute hazards and long-term climate trends will be completed as part of the Lake Whatcom Climate Vulnerability Assessment. This analysis will evaluate rising temperatures, drought, and changing precipitation patterns and will inform long-range water utility planning among Lake Whatcom partners.

### 2025 Highlighted Metrics

2025 expenditures: \$60,000

## Looking Ahead

With the RFP process complete and contract signed, the LWMP expects to have a contract in place and officially launch the CVA project in 2026. This assessment is the first of many iterative steps designed to help partners develop an adaptive watershed management approach for climate change. In conjunction with the vulnerability assessment, the project will include creating educational materials to help residents and visitors understand and prepare for these environmental changes.

# Forest Management

**Goal:** Increase forest management strategies that improve forest health, protect lake water quality, and minimize the risk of catastrophic wildfire.

The LWMP promotes responsible forest stewardship to improve forest health, protect lake water quality, and reduce wildfire risk. The program prepares and implements forest management plans for City- and County-owned lands, carries out projects to enhance structural diversity of forest lands, and reviews forestry activities by the Washington State Department of Natural Resources (DNR) and private landowners to reduce potential water quality impacts. LWMP also manages City- and County-owned forest roads to reduce erosion, tracks and reports permitted forest practices and works with partners to educate watershed residents about wildfire preparedness and climate resilience. These efforts are organized under the new Forest Management program area, which was introduced as a distinct program area in the 2025-2029 Lake Whatcom Management Program Work Plan.

## Lake Whatcom Watershed Forest Management Plan Development

In 2025, the City and County made significant progress on developing the first joint Forest Management Plan for County- and City-owned lands in the Lake Whatcom watershed. A nearly final draft was completed and prepared for State Environmental Protection Act review. Approval by County and City Councils is anticipated in 2026. This plan reflects long-standing community, staff, and elected-official support for protecting Lake Whatcom.

The County and City selected the ecology-driven forestry consultants from Northwest Natural Resource Group (NNRG) to draft this long-term plan that will protect water quality, improve forest health, and support responsible recreation access where appropriate. The plan guides forest management across more than 13,000 acres, including:

- **County-managed forest lands with recreation access:** Whatcom County manages approximately 9,600 acres of parkland, including Lookout Mountain Forest Preserve and Lake Whatcom Park, which were reconveyed from DNR. These areas support passive recreation such as hiking and biking.
- **City-managed forest lands preserved for water quality:** The City manages more than 3,800 acres of land acquired through the Lake Whatcom Land Acquisition and Preservation Program (see Program Area 1), which permanently protects undeveloped forestland in the Lake Whatcom watershed.



*Derelict structure demolition*



*Forest health inspection at Fir Creek Preserve*



*Fuel reduction at Agate Pond Preserve*



*Tree thinning at Anderson Creek Preserve*

# Forest Management



Public tour of Lookout Mountain with forest experts

### Plan Purpose and Recommendations

The Lake Whatcom Forest Management Plan inventories current forest conditions and provides site-specific recommendations for enhancing forests to reduce water quality impacts, promote forest health, and improve resilience to climate change, wildfire, and disease. The plan recognizes the distinct management purposes for City and County properties and tailors recommendations accordingly.

### Community Involvement

Community engagement played a central role throughout plan development. Public input was collected on the plan in two phases – early scoping and review of the draft plan.

Between April and July 2025, early engagement helped shape the plan’s goals and recommendations. Input came from:

- Engage Bellingham, an online platform for collecting public input (56 comments)
- A community meeting at Silver Beach Elementary School
- Two community forest tours in the Lake Whatcom watershed
- Meetings with Tribal partners, watershed and recreation stakeholders, and advisory committee representatives
- Conversations with agency staff knowledgeable about historical forest management in the watershed

To support public understanding of the plan’s purpose, the County, City, and NNRG also produced a 12-minute educational video featuring a virtual tour of forest stands at Lookout Mountain Forest Preserve. Released in August, this video received more than 600 views on the City’s YouTube channel.

The draft Plan was posted in November on Engage Bellingham, accompanied by a public survey assessing the plan’s alignment with community values. Eighty-eight participants completed the survey, with most respondents expressing support for the plan’s direction. Comments received through the survey were reviewed and incorporated into the final draft. The final draft was submitted to the Whatcom County Planning and Development Services department for non-project State Environmental Policy Act (SEPA) review. Once approved, it will be brought forward to City and County Councils for adoption.



Virtual tour of Lake Whatcom forests on City’s YouTube channel

# Forest Management

## Forest Practice Activities

In 2025, there were 246 acres of forestland harvested in the Lake Whatcom watershed, as tracked through the DNR’s Forest Practice Application System. There were no applications submitted to DNR for herbicide use.

City staff review all forestry activities in the Lake Whatcom watershed to minimize potential impacts to lake water quality. The City and County each have an appointee on the DNR-led Interjurisdictional Committee to make recommendations around riparian management zones, regulations related to harvests, and road construction on unstable slopes. In 2025, the City continued to conduct site visits for commercial harvests on private and public land, resulting in adjusted boundaries and expanded buffers around waterways to further protect water quality.

On a statewide level, the Washington Forest Practices Board, supported by the Department of Natural Resources (DNR), adopted new Type Np stream buffer rules on November 12, 2025, with an effective date of August 31, 2026. The rule increases riparian protection for non-fish bearing, perennial streams in Western Washington, requiring 75-foot no-harvest buffers along the stream to protect water quality.



*Lookout Mountain road repair project*

## Forest Roads

In 2025, the County began the first phase of repairing the LM-2000 road on Lookout Mountain, which sustained significant damage during major storm events in 2018 and 2021. Landslides, culvert failures, and erosion undermined the road, which provides access for over 40,000 annual recreational visitors and houses critical telecommunications infrastructure serving EMS and federal agencies. Road repairs focus on reducing erosion risk through slope stabilization while maintaining access to communications towers and recreation areas.



*Staff planting trees at Agate Bay Preserve*

## Forest Management Staffing

Both the City and County continue to build staff capacity in forest management. In late 2024, the City hired a new six-person field crew dedicated to managing City-owned lands in the Lake Whatcom watershed, including forested properties (see the Land Preservation Program Area for more information about this work). The County recently welcomed a new Land Management Supervisor. This position, supported by two year-round and two seasonal staff members, will implement forest management in County parks located in the watershed. Over time, this will enable greater ability to follow the recommendations in the Forest Management Plan, including activities like maintaining or decommissioning forest roads.

# Forest Management

## Wildfire Preparedness

Climate change is increasing wildfire risk in the watershed’s forests by creating hotter, drier summer conditions. To mitigate this risk, the City contracts with the Whatcom Conservation District’s Wildfire Risk Reduction Program, which provides wildfire risk assessments for landowners. The City funds this program for private properties that are adjacent to protected City property.

In 2025, 42 properties received assessments through the program. These assessments result in recommendations for both the participating private property owner and for the City to reduce wildfire risk on their properties. The City’s field crew follow these recommendations to reduce fuel loads by limbing trees, removing dead vegetation, and thinning overstocked stands, particularly along property boundaries. These actions are critical to protecting preserved forestlands and homes from wildfire. In 2025, the field crew did significant wildfire risk reduction work in the North Beaver Creek Preserve on the west side of Lake Whatcom.



City crew thinning dense tree stand as part of a wildfire risk reduction project

### 2025 Highlighted Metrics

- 246 acres of land harvested in the Lake Whatcom watershed, with review and comment from a certified arborist at the the City
- 42,540.8 feet of forest roads maintained on City and County land
- 42 properties participated in a wildfire risk assessment
- 2025 expenditures: \$890,512

## Looking Ahead

Although the Lake Whatcom Forest Management Plan was substantially completed in 2025, a few steps remain before it is finalized. In 2026, the plan will undergo a SEPA review and then be presented to the City and County Councils for adoption. Implementation of the plan’s forest management recommendations on City- and County-owned lands will also begin in 2026.

## 2025 Work Plan Expenditures

Program Area	Staff Costs*	Capital Costs	Other Costs**	2025 Total
Land Preservation	\$594,204	\$11,564,000	\$159,292	\$12,317,496
Stormwater Management	\$869,222	\$1,293,915	\$893,790	\$3,056,927
Land Use	\$225,850	--	--	\$225,850
Monitoring and Data	\$50,261	--	\$411,892	\$462,153
Hazardous Materials	\$25,524	--	--	\$25,524
Recreation	\$429,500	\$451,500	\$45,700	\$926,700
Aquatic Invasive Species	\$769,796	--	\$312,879	\$1,082,675
Utilities and Transportation	\$467,269	\$530,000	\$321,687	\$1,318,956
Education and Engagement	\$150,906	--	\$61,868	\$212,774
Administration	\$234,372	--	--	\$234,372
Climate Action	\$60,000	--	--	\$60,000
Forest Management	\$126,632	\$599,380	\$164,500	\$890,512
<b>LWMP Work Plan Total</b>	<b>\$4,003,536</b>	<b>\$14,438,795</b>	<b>\$2,371,608</b>	<b>\$20,813,939</b>

\*Staff costs include actual budgeted staff costs for each program area (including benefits).

\*\*Other costs include supplies, materials, equipment, consultant fees, interfund charges, taxes, bank charges, and procedural costs.

## 2025 Reporting Metrics

Program Area	2024 Value	2025 Value
<b>Land Preservation</b>		
Number of new acres acquired or otherwise protected	52 acres	1,056 acres
Number of development units removed from the watershed	17 units removed	35 units removed
Total cumulative acres in protected status	<i>New metric</i>	3,872 acres
Number of property owners contacted	<i>New metric</i>	736 contacts
Number of acres managed per year and type of management activities	<i>New metric</i>	Acres of native plants installed: 14.5  Acres of invasive plants managed: 61  Acres of forest management activities: 3.4

## 2025 Reporting Metrics

Program Area	2024 Value	2025 Value
<b>Stormwater Management</b>		
Additional pounds of phosphorus reduced per year through phosphorus treatment and flow control capital projects	21.4 pounds/year	10.03 pounds/year
Percentage of upland development draining to public outfalls managed by capital stormwater facilities	<i>New metric</i>	City manages 99% of 458 acres of upland development draining to its outfalls, which includes 370 developed acres inside City Limits and 88 developed acres from outside City Limits.  County manages 24% of 1,702 acres of upland development draining to its outfalls.
Number of outfalls that have best available capital stormwater treatment within the City limits and the urbanized areas of the County	<i>New metric</i>	36 of 45 outfalls
Pounds of phosphorus reduced per year through voluntary residential improvements	-0.95 pounds/year (City)	0.51 pounds/year
Number of properties with completed residential stormwater projects per year	27 new properties	27 new properties
Number of square feet of private property improved through voluntary residential projects per year	<i>New metric</i>	104,348 square feet
Number of private stormwater facility inspections completed per year	<i>New metric</i>	<i>Will be measured in 2029</i>
Proportion of watershed residents who are knowledgeable about water quality impacts and engage in behaviors to reduce these impacts, as measured every five years through the Lake Whatcom Watershed Survey	--	<i>Will be measured by Lake Whatcom Watershed Survey in 2029</i>

## 2025 Reporting Metrics

Program Area	2024 Value	2025 Value
<b>Land Use</b>		
Acres of phosphorus-neutral properties developed or re-developed in accordance with land use regulations within City limits.	<i>New metric</i>	1.15 acres
Acres of developed surface treated by phosphorus-limiting Best Management Practices (BMPs) installed to meet requirements of land use regulations within City limits.	0.04 acres	0.83 acres
Acres of newly established Native Vegetation Protection Areas (NVPAs) through new development and redevelopment in City limits.	0 acres	0.32 acres
Proportion of watershed residents who are knowledgeable about seasonal construction, special building, and clearing regulations measured every five years through the Lake Whatcom Watershed Survey.	2024 survey results: <ul style="list-style-type: none"> <li>• Proportion of homeowners who are aware of regulations applying to seasonal timing of construction: <b>52%</b></li> <li>• Proportion of homeowners who intentionally do construction only during the seasonal work window: <b>52%</b></li> <li>• Proportion of homeowners who are aware of special regulations that apply to construction and landscaping activities in the watershed: <b>35%</b></li> </ul>	<i>Will be measured by Lake Whatcom Watershed Survey in 2029</i>

## 2025 Reporting Metrics

Program Area	2024 Value	2025 Value
<b>Monitoring and Data</b>		
Number of lake water quality samples collected per year	1,194 samples	1,194 samples
Number of tributary water quality samples collected per year	131 samples	129 samples
Number of stormwater samples collected per year	<i>New metric</i>	City: 42 samples, 208 data points County: 127 samples, 11 data points
<b>Hazardous Materials</b>		
Proportion of watershed residents who are knowledgeable about proper hazardous materials disposal measured every five years through the Lake Whatcom Watershed Survey	2024 survey results: 61%	<i>Will be measured by Lake Whatcom Watershed Survey in 2029</i>
Number and type of spills, illicit discharges, or hazardous material incidents reported in the watershed, and incident specific responses	14 incidents	10 incidents
Proportion of watershed residents who are knowledgeable about how to report spills, measured every five years through the Lake Whatcom Watershed Survey	2024 survey results: 48%	<i>Will be measured by Lake Whatcom Watershed Survey in 2029</i>
Number of staff trained in spill prevention and response per year	6 (City only)	50 City and County Staff

## 2025 Reporting Metrics

Program Area	2024 Value	2025 Value
<b>Recreation</b>		
Number of pet waste stations maintained in the watershed per year	31 stations	34 stations
Number of acres of City and County-owned recreational areas managed using IPM strategies	<i>New metric</i>	65 acres (City-owned areas)
Number of acres of impervious surface on City and County-owned recreational areas that follow stormwater BMPs	<i>New metric</i>	4.5 acres (City-owned areas)
Miles of trails maintained with an emphasis on minimizing water quality impacts	22 miles	26.5 miles
Miles of unauthorized, user-built trails decommissioned per year	0.5 miles	0.75 miles (City only)
Number of trailhead amenities added that minimize water quality impacts	<i>New metric</i>	0
Number of directional signs installed	<i>New metric</i>	0
Educational materials provided about water quality concerns, AIS, boating rules, electric-powered boats, and public restrooms	<i>New metric</i>	0
Estimated number of individuals using parks and trails in the watershed per year	206,382 visitors	753,237 visitors
Number and type of informational materials sent to watershed residents per year (see Program Area 9: Education & Engagement)	<i>New metric</i>	<i>See Education &amp; Engagement section</i>
Number of interpretive or informational materials installed, maintained, or distributed per year	<i>New metric</i>	5 interpretive signs maintained

## 2025 Reporting Metrics

Program Area	2024 Value	2025 Value
<b>Aquatic Invasive Species</b>		
Number of watercraft inspections conducted	12,304 inspections	15,572 inspections
Number of watercraft decontaminations conducted	4 decontaminations	5 decontaminations
Number of people who completed the online AIS Awareness Course	3,032 people	3,571 people
Number of non-boating visitors interacted with at check stations	738 people	1,161 people
Proportion of watershed residents who are knowledgeable about AIS and compliance with inspection requirements, measured every five years through the Lake Whatcom Watershed Survey	<p>2024 survey results:</p> <ul style="list-style-type: none"> <li>• Proportion of respondents who are aware of AIS concerns in the lake: <b>55%</b></li> <li>• Proportion of recent boat users who are aware of AIS concerns in the lake: <b>75%</b></li> <li>• Proportion of recent boat users who participated in the boat inspection program: <b>71%</b></li> </ul>	<i>Will be measured by Lake Whatcom Watershed Survey in 2029</i>
Number of sheriff patrols on Lake Whatcom and Lake Samish to enforce AIS compliance	<i>New metric</i>	31 patrols
Number of zebra and quagga mussels identified per year	<i>New metric</i>	0 identifications
Number of new AIS introductions per year	0	0 new introductions
Number and type of surveys, monitoring events, and sampling completed each year	<i>New metric</i>	15 plankton tows, 20 eDNA samples

## 2025 Reporting Metrics

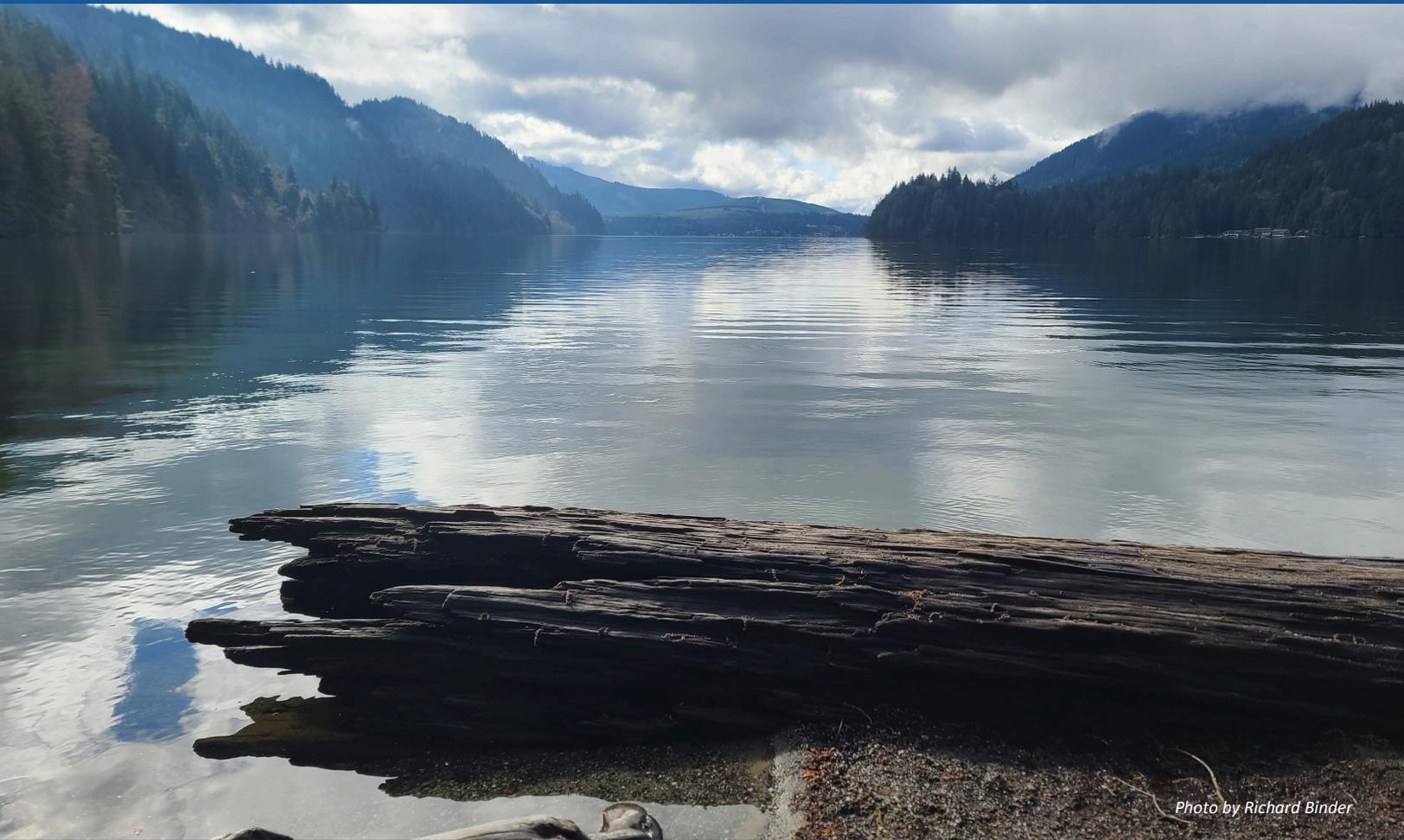
Program Area	2024 Value	2025 Value
<b>Utilities and Transportation</b>		
Estimated gallons of water conserved in the City of Bellingham and Lake Whatcom Water and Sewer District service areas per year	455,397 gallons	377,250 gallons
Proportion of watershed residents who are knowledgeable of water conservation concerns related to water supply from Lake Whatcom, measured every five years through the Lake Whatcom Watershed Survey.	2024 survey results: 36%	<i>Will be measured by Lake Whatcom Watershed Survey in 2029</i>
Number of households that receive drinking water from Bellingham's Water Treatment Plant, the District's water systems, or directly from Lake Whatcom that participate in residential rebate programs each year	<i>New metric</i>	21 households
Average monthly compliance rate (%) of OSS in the Lake Whatcom watershed per year	67%	69%
Proportion of OSS by evaluation results (satisfactory; maintenance needed; failure) in the Lake Whatcom watershed per year	Satis: 299 (80%) Maint: 72 (19%) Failure: 1 (1%)	Satis: 326 (79%) Maint: 82 (20%) Fail: 3 (1%)
Summary of OSS failures in the Lake Whatcom watershed per year	1 failure was corrected	All 3 failures have new installed OSS
Number of sewer failures (overflows) in the Lake Whatcom watershed per year	1 failure	3 failures
Number of sewer overflows that reach Lake Whatcom per year	1 overflow	1 overflow
Pounds of phosphorus removed through operations and maintenance activities	40 pounds	40 pounds
Number of catch basins cleaned and repaired	4 cleaned; 2 repaired	345 cleaned; 17 repaired
Proportion of watershed residents who have used alternative methods of transportation in the past year, measured every five years through the Lake Whatcom Watershed Survey	2024 survey results: 32%	<i>Will be measured by Lake Whatcom Watershed Survey in 2029</i>

## 2025 Reporting Metrics

Program Area	2024 Value	2025 Value
<b>Education and Engagement</b>		
Number and type of information materials sent to watershed residents per year	12,239 items	7,629 items
Number of unique visitors to Lake Whatcom Management Program website per year	8,898 active users	9,500 active users
Number of participants in the Lake Whatcom Watershed Survey every five years	<i>New metric</i>	<i>Will be measured by Lake Whatcom Watershed Survey in 2029</i>
Level of watershed residents' knowledge of and participation in key stewardship practices, measured every five years through the Lake Whatcom Watershed Survey	<i>New metric</i>	<i>Same as above</i>
Proportion of watershed residents who pick up pet waste on walks and at home	<i>New metric</i>	<i>Same as above</i>
Proportion of watershed residents who use watershed-friendly vehicle care practices	<i>New metric</i>	<i>Same as above</i>
Proportion of watershed residents who choose not to use chemical weed killers on their yard	<i>New metric</i>	<i>Same as above</i>
Proportion of watershed residents who use 0% phosphorus fertilizer	<i>New metric</i>	<i>Same as above</i>
Proportion of watershed residents who maintain their septic systems	<i>New metric</i>	<i>Same as above</i>
Number of students who participate in youth education programs each year, including the Bellingham Water School Program offered by the City to fifth grade students in the Bellingham School District	920 students	995 students

## 2025 Reporting Metrics

Program Area	2024 Value	2025 Value
<b>Administration</b>		
Number and type of meetings held per year	<i>New metric</i>	33 meetings total across policy, technical, outreach, and coordination types
<b>Climate Action</b>		
Complete Lake Whatcom Climate Vulnerability Assessment (CVA)	<i>New metric</i>	RFP complete; In progress
Number and type of educational materials created from CVA activities and results	<i>New metric</i>	In progress
<b>Forest Management</b>		
Acres of timber harvested and replanted on forestlands per year	130.1 acres (City-owned lands)	246 acres harvested (City-owned lands)
Acres of land treated with herbicides on forestlands per year	64 acres	0.005 acres
Feet of forest roads maintained	<i>New metric</i>	42,540 feet
Feet of forest roads abandoned	0	0
Proportion of watershed residents who are knowledgeable about wildfire risk reduction work, measured every five years through the Lake Whatcom Watershed Survey	<i>New metric</i>	<i>Will be measured by Lake Whatcom Watershed Survey in 2029</i>
Number of watershed residents who have participated in a wildfire risk assessment	<i>New metric</i>	42 homeowners



*Photo by Richard Binder*

## Lake Whatcom Management Program Contacts

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