Western Washington Phase II Municipal Stormwater Permit

Whatcom County Public Works

March 10, 2026

BACKGROUND

Regulatory Drivers:

- The Federal **Clean Water Act** directs the Environmental Protection Agency (EPA) to authorize the National Pollutant Discharge Elimination System (NPDES) Permit Program to state governments.

- The **State Water Pollution Control Act** authorizes Washington State Department of Ecology to implement the NPDES Permit Program through the *Western Washington Phase II Municipal Stormwater Permit (Also referred to as the "NPDES Permit or NPDES Phase II Permit").*

- The **NPDES Permit** regulates **discharges** from a *small* ***Municipal Separate Storm Sewer Systems (MS4s)*** into water bodies of the State (e.g. rivers, lakes, etc.).

  - **MS4s** are publicly-owned and operated conveyance systems (e.g. roads with drainage systems, catch basins, curbs, gutters, ditches, storm drains, etc.).

BACKGROUND, cont.

- Ecology requires jurisdictions to obtain coverage if they are a small MS4. **Whatcom County is an owner and operator of a small MS4, and is a "Phase II Permittee".**

- Whatcom County under Permit since 2007.
  - Whatcom County has completed five permit cycles
  - Five-year Permits; **Current Permit Effective August 1, 2024-July 31, 2029**

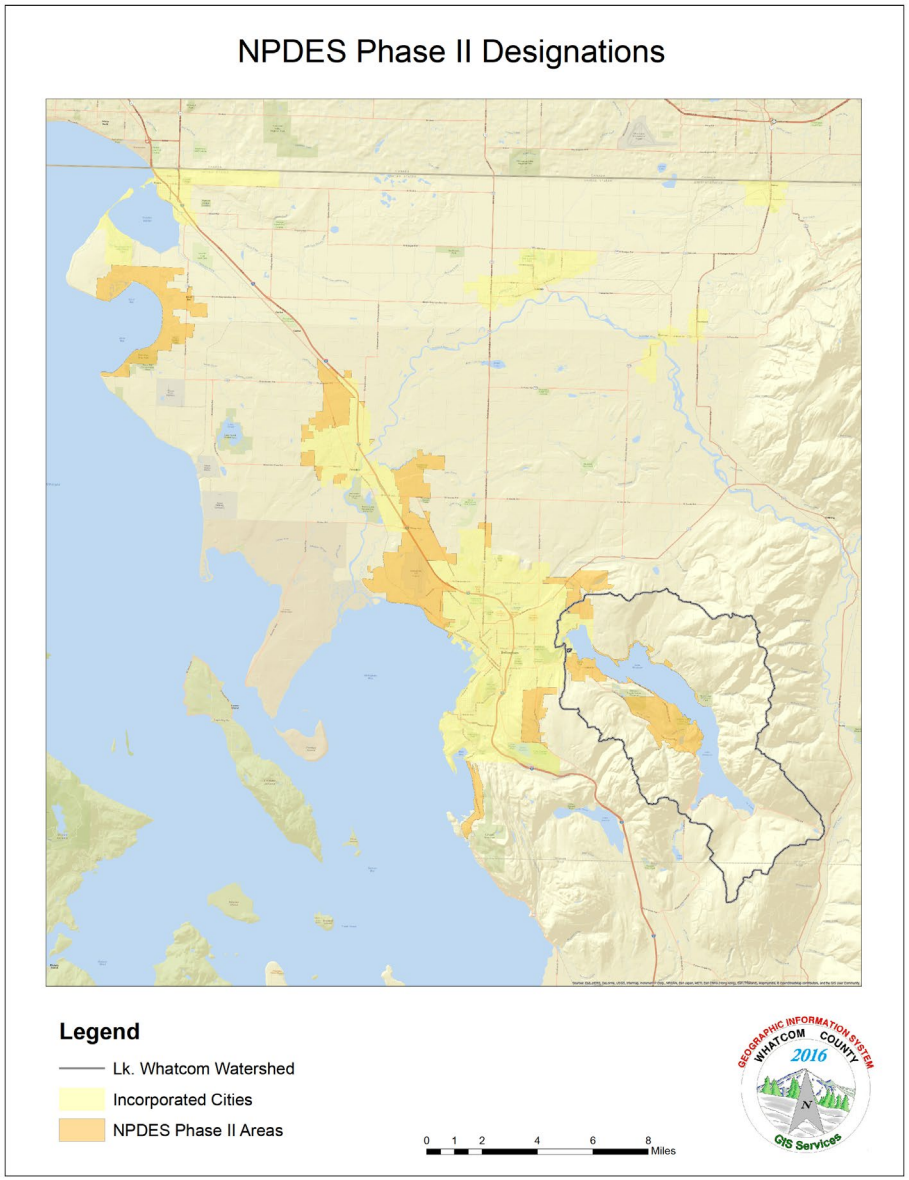
- Public Review of Draft Permits a year before new effective date.
  - Appeals can be made to the Pollution Control Hearings Board

- All new requirements allow for about 2-3 years before the initial deadlines are set.

- Jurisdictions submit annual reports to Ecology by March 31st of every year for the previous calendar year of work.

NPDES AREA AND FACILITIES

- Approximate number of MS4 facilities:
  - 3,100 catch basins
  - 100 miles of ditches
  - 390 outfalls (public and private
- Stormwater Treatment and Flow Control Capital Facilities:
  - 12 filter vault project areas
  - 11 swales/bioretention project areas
  - 3 detention/ retention ponds
  - 1 modular wetland
- NPDES area covers approximately 17,000 acres



TWO-PRONGED APPROACH TO PERMIT COMPLIANCE

- Whatcom County responsible for specific requirements applicable to County-owned MS4 infrastructure.
  - Ex: Inspections, maintenance, monitoring, field reconnaissance, employee training, etc.
- Whatcom County responsible for creating a predictable path for private property owners to protect water quality.
  - Ex: adopted ordinances, technical support, educational opportunities (programs or events), etc.

BIOINFILTRATION SWALE REPAIR AND ENHANCEMENT AT LAKEWOOD LANE AND LAKEWAY DRIVE (BEHIND GENEVA ELEMENTARY SCHOOL)

PERMIT PROGRAM AREAS

- Stormwater Planning
- Public Education & Outreach
- Public Involvement & Participation
- MS4 Mapping and Documentation
- Illicit Discharge Detection & Elimination (IDDE)
- Controlling Runoff From New Development, Redevelopment, and Construction Sites
- Stormwater Management for Existing Development
- Source Control Program for Existing Development
- Municipal Operations and Maintenance

ADDITIONAL REQUIREMENTS

- Compliance With Total Maximum Daily Load Requirements (TMDL)
- Monitoring and Assessment

VELOCITY CONTROL AND BANK STABILIZATION PROJECT: AIRPORT WAY (ADJACENT TO RUNWAY).

EXAMPLE REQUIREMENTS FOR PERMIT

Municipal Operations & Maintenance

- Catch basin inspections every 18-24 month period, with maintenance performed within 6 months of identification
- Annual maintenance of publicly-owned treatment and flow control facilities (Capital Projects), at a minimum; spot check inspections annually

Illicit Discharge Detection & Elimination

- Ordinance for identification and response to spills and illicit discharges into the County's MS4.

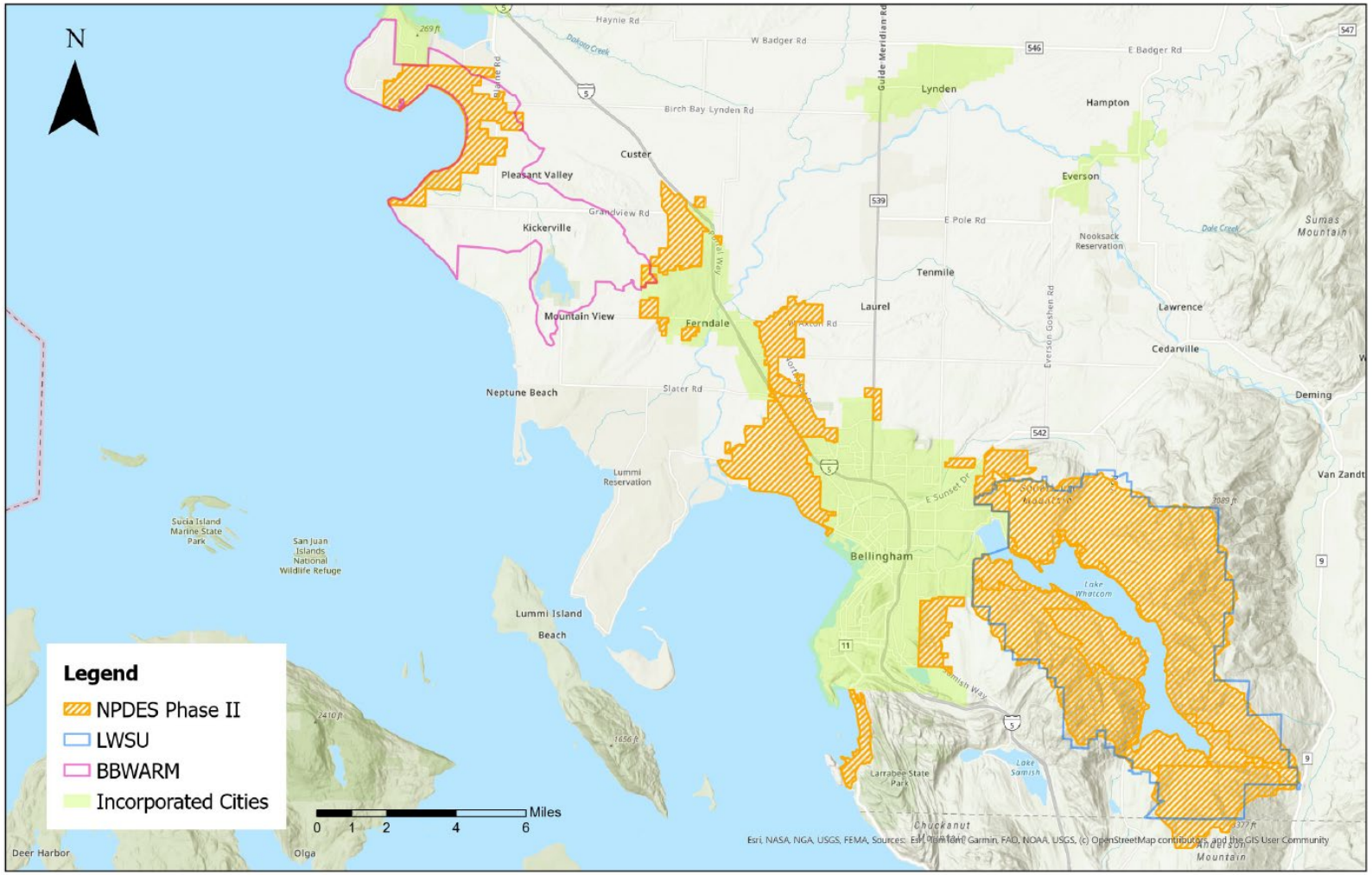
Public Education & Outreach

- Identifying audiences, subject areas, best management practices, and evaluating behavior change
  - Example: Tabling events and surveys for dog park user knowledge of water quality impacts of bacteria from lack of pet waste management

Controlling Runoff from Development

- Adopting regulations consistent with the Stormwater Management Manual for Western Washington.
  - Example: Low Impact Development (LID), Appendix 1 of Manual

WHATCOM COUNTY NPDES AREA + LAKE WHATCOM WATERSHED



NPDES area plus Lake Whatcom watershed is approximately 44,000 acres.

NPDES PERMIT APPENDIX 2: LAKE WHATCOM TMDL

- Outlines additional requirements for Whatcom County and City of Bellingham must implement at each Permit cycle.
  - Tracking of stormwater treatment and flow control capital projects
  - Number of acres treated
  - Calculating phosphorus-reducing metrics
  - Tracking development
  - Listing of activities without phosphorus reducing calculations
    - Education and outreach
    - Ditch improvements
  - Updating of loading and lake response models
  - Develop and submit an Implementation Plan every five years, with five and ten year measures.
  - 2015 Dispute Resolution Clarifications between Whatcom County and Department of Ecology

- Appendix 2 is the enforcement mechanism to achieving the goals of the TMDL.

LAKE WHATCOM WATERSHED TMDL DISPUTE RESOLUTION

- Prior to the finalized TMDL, Whatcom County and Ecology went into dispute resolution to ensure other measures to protect water quality were being taken in more rural and forested areas of the Lake Whatcom watershed.

- Result: November 25, 2015 clarification document between Whatcom County and Ecology for additional measures to ensure TMDL goals are achieved:
  - Adoption of enhanced development regulations outside of NPDES Permitted area
  - Expanded illicit discharge regulations outside of NPDES Permitted area
  - Enhanced inspection and maintenance schedule for catch basins inside and outside of NPDES Permitted area

TOTAL MAXIMUM DAILY LOAD

- Sets limits on:
  - Phosphorus entering lake to address low dissolved oxygen
  - Fecal coliform in tributaries
- Applies to City and County
- Enforceable under NPDES permit
- Approved in 2016
- 50-year restoration timeline
- WA Department of Ecology tracks progress and updates permits
- Implementation Plan follows Lake Whatcom work plans

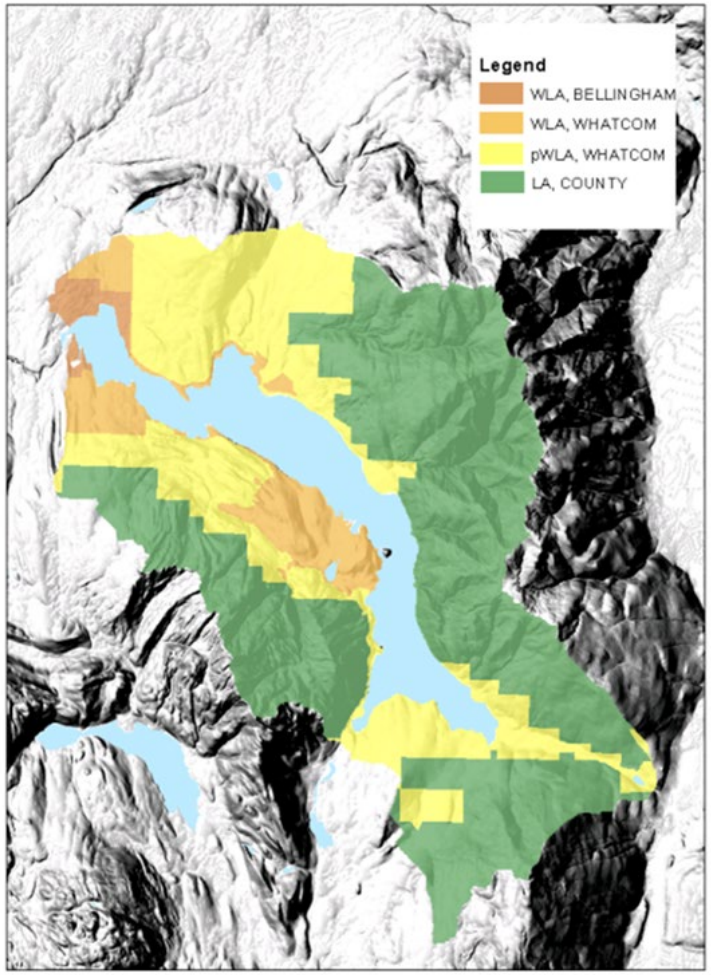
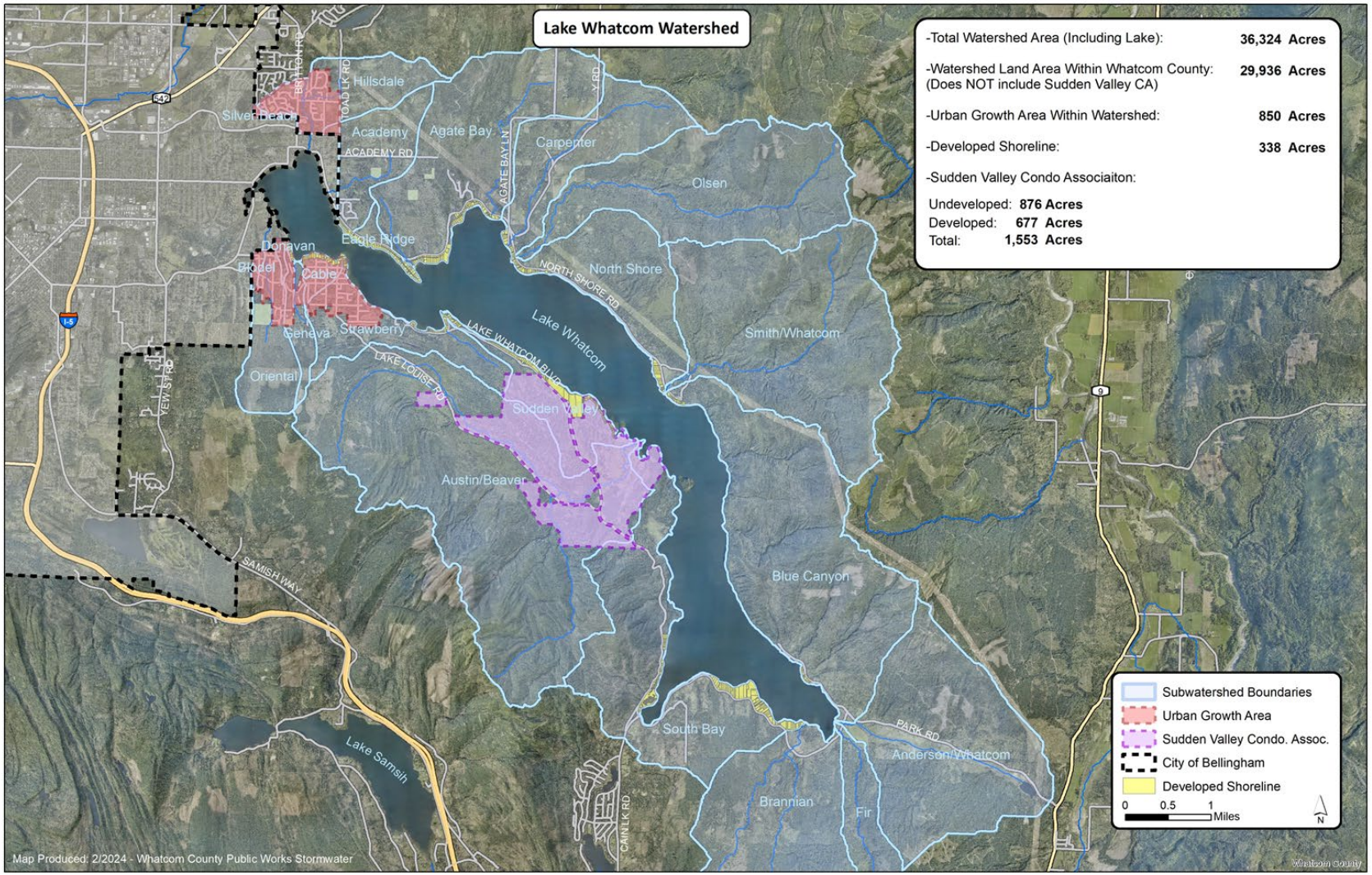
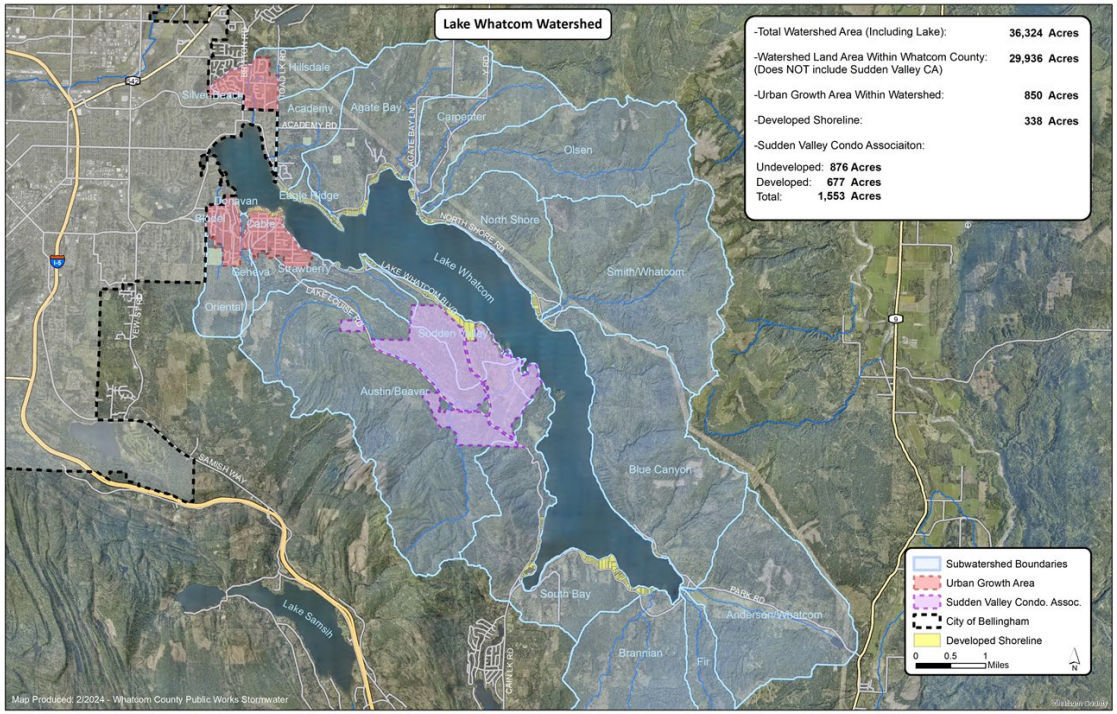


Figure 8. Mapped Areas of WLA, proposed WLA and LA.

DEVELOPED AND UNDEVELOPED AREAS





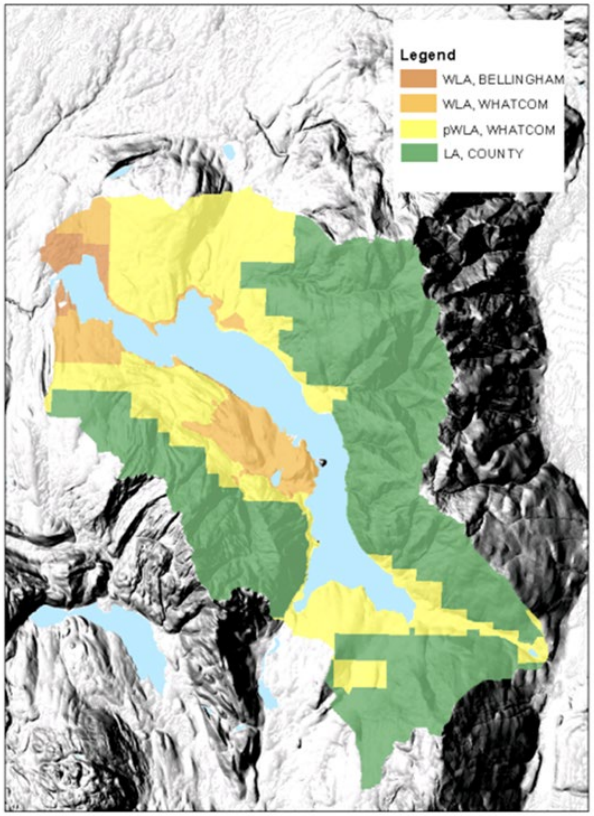


Figure 8. Mapped Areas of WLA, proposed WLA and LA.

Lake Whatcom Management Program Overview

Lake Whatcom Management Program

Partnership between:

- City of Bellingham
- Whatcom County
- Lake Whatcom Water & Sewer District

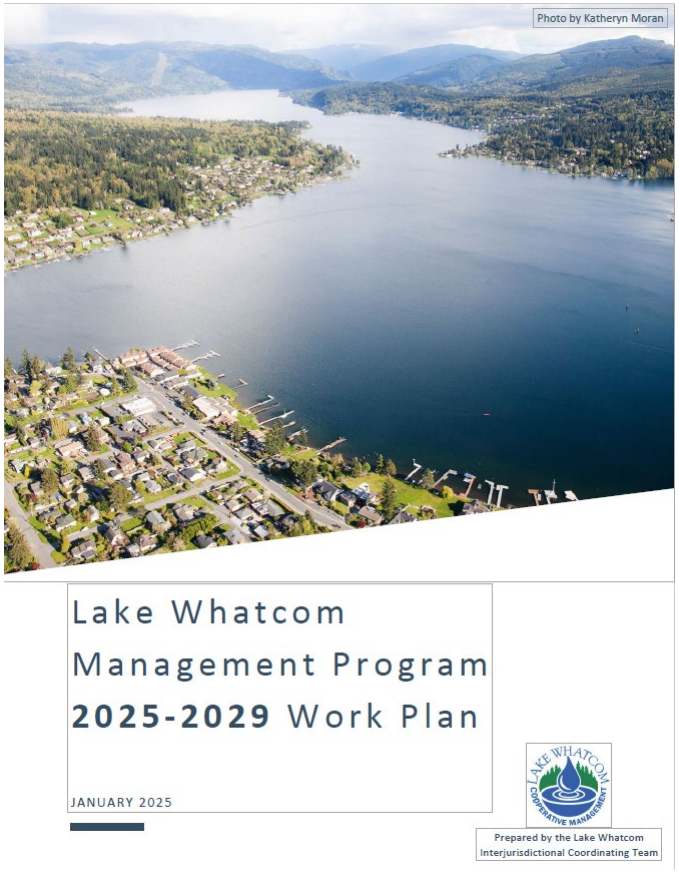
Guided by:

- 1992 Joint Resolution (shared goals)
- 1998 Interlocal agreement (formal governance)

Driven by science & regulations:

- Clean Water Act TMDL
- NPDES Permit Req.
- Lake Whatcom Landscape Plan
- Annual Work Plans
- Land Use Regs & Policy

2025 - 2029
Lake Whatcom Work Plan

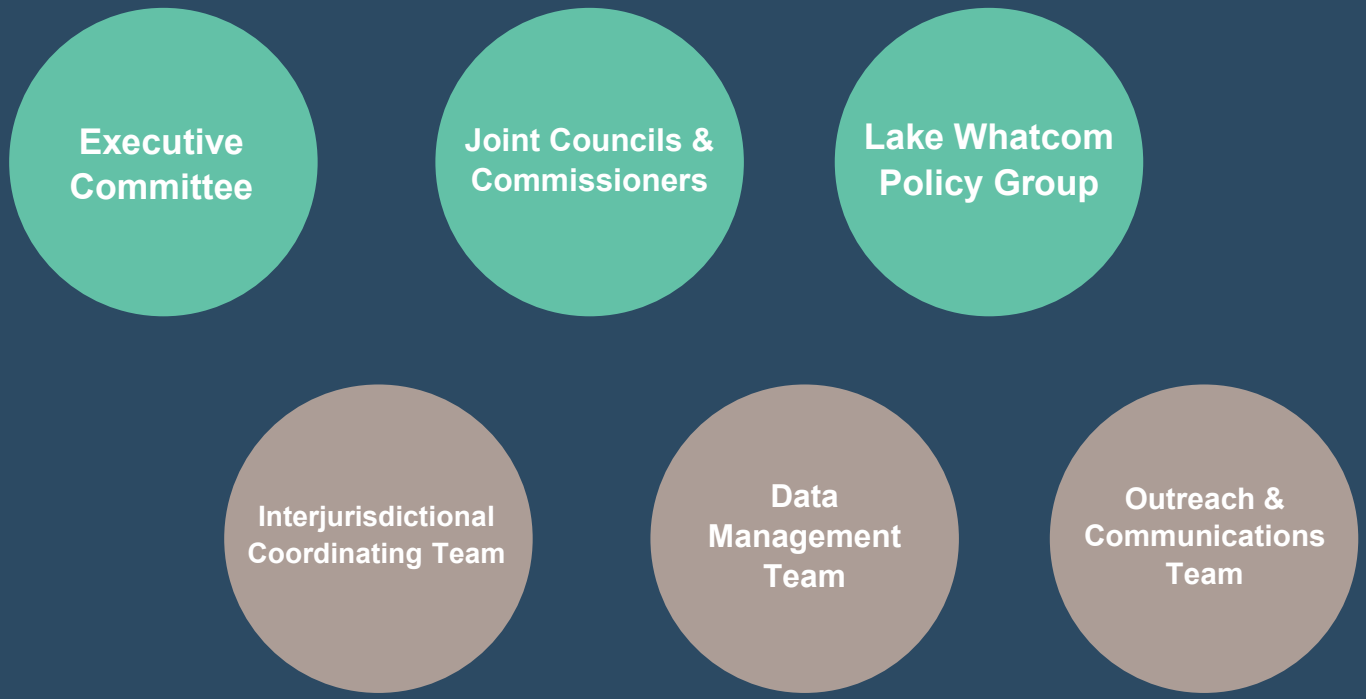


Lake Whatcom Management Program

12 Program Areas

1. Land Preservation
2. Stormwater
3. Land Use
4. Monitoring & Data
5. Hazardous Materials
6. Recreation
7. Aquatic Invasive Species
8. Utilities & Transportation
9. Education & Engagement
10. Administration
11. Climate Action
12. Forest Management

Governance Structure: Shared Leadership & Accountability



Policy Group

Members: 2 County Council, 2 City Council, 1 Lake Whatcom Water & Sewer District Commissioner, 1 Representative of Sudden Valley Community Association

- Provides strategic policy guidance for watershed protection across jurisdictional boundaries
- Acts as an advisory forum, not a voting body
- Reviews and supports:
  - Five-year work plans and budgets
  - Major policy and regulatory issues
- Helps ensure:
  - Progress toward water quality targets
  - Compliance with stormwater permits
  - Policy consistency across jurisdictions
  - Transparency with elected officials and the public
- Serves as a space for collaborative problem-solving

Joint Councils & Commissioners Meeting

Wednesday, April 1, 2026
6:30–8:30 PM

City of Bellingham Council Chambers