



WCWP.WhatcomCounty.org

*A partnership to reduce fecal bacterial
pollution in Whatcom County's
waterways*

2025 Annual Report

About This Report

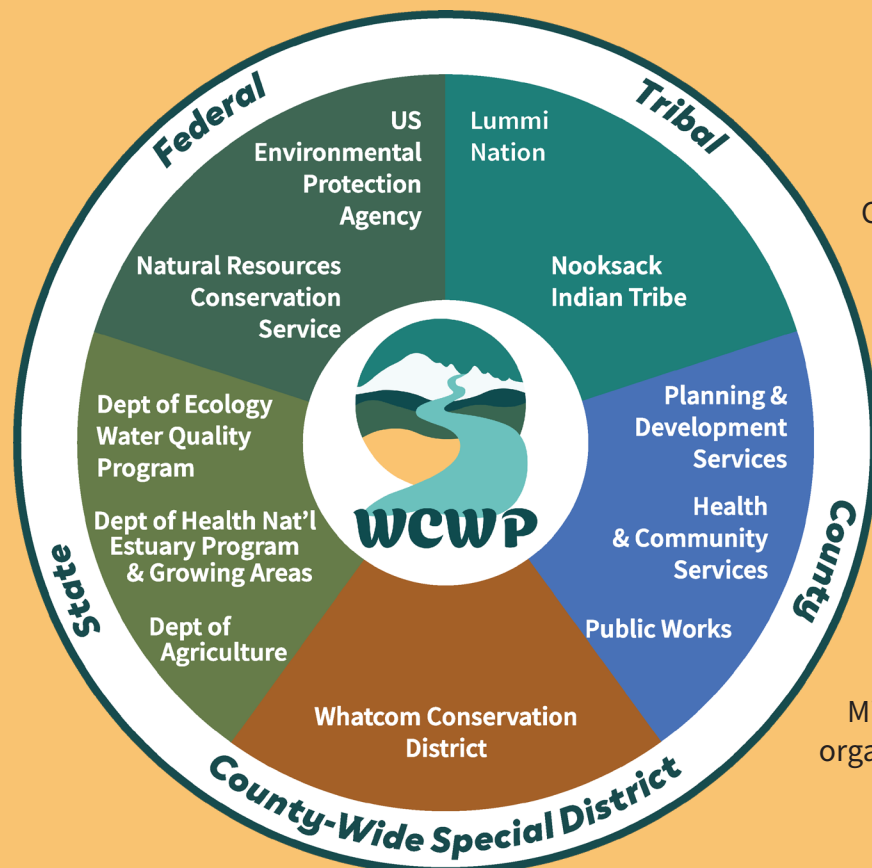
This is the first Whatcom Clean Water Program (WCWP) Annual Report, highlighting accomplishments and challenges from the 2025 Water Year (October 2024 – September 2025) and outlining planned actions for the 2026 water year (October 2025 – September 2026). Metrics, updates, and other information for this report were provided by WCWP partners with core responsibilities under the program’s charter. This report is designed to provide a high-level summary of the program’s purpose, activities, and progress toward meeting its objectives.

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Who We Are and What We Do

Nonpoint source water pollution is pollution that does not originate from a single distinct source. Reducing nonpoint pollution is a challenge that requires coordination of authorities and resources at local, state, federal, and tribal levels. Following water quality downgrades from bacterial pollution in Whatcom County commercial and tribal shellfish growing areas, the WCWP was formed in 2012 to coordinate efforts that address sources of fecal bacterial pollution in our community’s waterways. Program partners work together to identify and reduce preventable sources of fecal bacteria with the goal of protecting Whatcom County public health and shellfish growing areas.

Whatcom Clean Water Program Partner Organizations



Other partners include:

Puget Sound Partnership, Washington State Conservation Commission, Whatcom County Council, Washington State Office of the Governor, commercial shellfish growers, Washington Department of Fish and Wildlife, other Washington Department of Ecology Programs, and watershed improvement/drainage districts. The cities of Lynden and Ferndale engage in WCWP collaborative efforts to identify and correct pollution sources from within their jurisdictions. We work with additional partners with aligned goals to reduce bacteria pollution including: B.C. Ministry of Environment and Parks, non-profit organizations, Drayton Harbor Oyster Company, Port of Bellingham, and others.

Water Year 2025 - Year in Review

Regaining Program Function

Water Year 2025 (October 2024 to September 2025) was a time of restored program function after a period of significant staff turnover, prolonged vacancies, and disruptions from COVID-19 and the 2021 floods. The second annual all-staff retreat in June 2025 helped build relationships between partners and generate ideas for program improvements. 2025 brought staff stability and the ability to initiate program adaptations with fresh perspectives and new ideas. These adaptations included enhancing our efforts through collaboration and alignment of purpose.

Enhanced efforts through collaboration and aligning of purpose

Collaboration included an enhanced pet waste outreach project with Skagit County to reach pet owners across both counties with unified messaging. The Whatcom Conservation District (WCD) and City of Ferndale initiated a new partnership to meet National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit requirements. This strengthened the WCD’s unique role in supporting both the WCWP and NPDES stormwater programs in Lynden and Ferndale, while improving the integration of water quality programs across the county.

In 2025, the Washington State Department of Ecology reached a major milestone publishing the Drayton Harbor Bacteria Total Maximum Daily Load (TMDL). The watershed cleanup plan was submitted to the Environmental Protection Agency (EPA) for approval. The TMDL utilized WCWP data and is building off existing WCWP partnerships to support implementation efforts. The TMDL provides summary information, analysis, and models that serve as a helpful resource for ongoing WCWP efforts to reduce bacteria pollution in the Drayton Harbor watershed.

Outside pressures

The WCWP does not operate in a vacuum. In 2025, the program experienced some notable external pressures. Changes in the federal administration created uncertainty around federal funding and programs. In addition, the cooperation and participation from community members, which pollution prevention relies on, was influenced by factors outside of local control. For example, rural landowners with wells received a legal notice from the Washington State Department of Ecology in March requiring them to self-report their water use so that a court can determine their legal right to use the water they rely on. Community members are understandably focused and concerned about water quantity and water rights. As another example, WCWP’s goal to better reach and engage Spanish-speaking community members was challenged due to that community’s heightened caution around immigration status.

Whatcom Clean Water Program Areas

To address non-point pollution sources, the WCWP focuses efforts in three primary areas: data and monitoring, landowner engagement, and education and outreach. These focus areas inform and reinforce one another, enabling the program to respond to evolving needs strategically and adaptively. These program areas are explained in detail starting on page 6.



The WCWP was formed to coordinate efforts and address sources of nonpoint fecal bacteria pollution in waterways flowing to Drayton Harbor and Portage Bay. The program initially prioritized these watersheds because fecal bacteria levels threatened public health and shellfish growing resources. Since then, the WCWP has expanded its geographic scope to include the Birch Bay and Lummi Bay watersheds. Work is conducted in other coastal watersheds as time and resources allow.

How to Read This Map

This map summarizes both recent conditions and long-term trends in fecal coliform bacteria concentrations, based on monitoring results at the most downstream monitoring site in each of eighteen drainage areas.

Current Conditions:

Each drainage is color-coded based on how well water quality met the following two-part health benchmark over the last calendar year (benchmarks are the former State of Washington water quality standards):

- Geometric Mean:** Less than 100 fecal coliform colony-forming units/100 mL
- Percent Exceeding 200:** Fewer than 10% of samples greater than 200 fecal coliform colony-forming units/100 mL

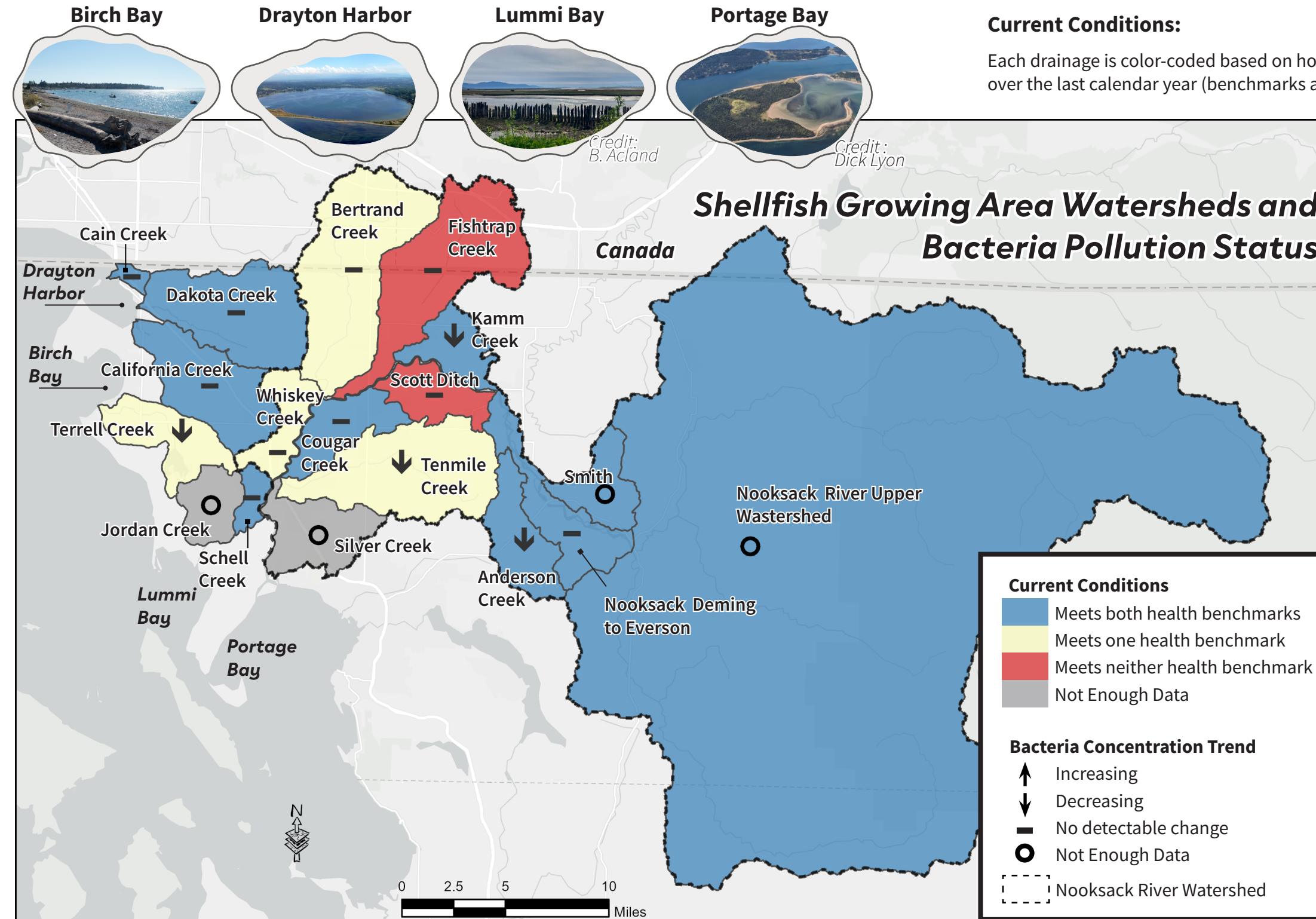
Meeting both parts indicates better short-term water quality conditions, meeting one part shows room for improvement, and meeting neither part indicates poor water quality.

Bacteria Concentration Trends:

Arrows show the direction of statistically significant trends in fecal coliform bacteria concentrations.

The WCWP uses the statistical software R to conduct a Seasonal Mann-Kendall trend analysis on the full available dataset for each site ($\alpha = 0.05$), following the approach used by the Washington State Department of Ecology for the Drayton Harbor TMDL study.

- This method accounts for seasonal variability and evaluates whether bacteria concentrations have increased, decreased, or shown no detectable change over time. The length of water quality records varies by site, from 2006-present at Terrell Creek to 2022-present at Smith Creek.
- Trends are not calculated for drainages with fewer than seven years of data. Gray-shaded drainages either lack sufficient data to assess current conditions or are not part of the WCWP's long-term monitoring program.



Water monitoring serves to track water quality trends, identify fecal bacteria sources, and better understand environmental impacts on fecal bacteria levels using activities like storm sampling. Monitoring tools include water quality sampling to measure fecal bacteria concentrations, laboratory and R-CARD® analysis, microbial source tracking (MST) studies (a type of testing that uses bacteria DNA to identify the types of animal contributing to fecal pollution), and autosampler projects.

Accomplishments and Successes

The WCWP advanced several strategic projects in Water Year 2025. A collaboration with EPA Region 10 used MST to identify bacteria sources at chronically elevated sampling sites. Results are expected in 2026. A new data dashboard was developed and published to help partners interpret high bacteria counts and prioritize resources. Storm-focused monitoring accomplishments included monitoring first-flush bacteria levels. Collaboration with British Columbia partners continued, emphasizing method alignment to ensure data comparability for joint sampling efforts.

2025 Challenges and Circumstances

Two planned projects were not implemented in Water Year 2025. Data related challenges prevented completion of an inter-lab bacteria species composition analysis. Preliminary results from both labs were low and comparable, unlike the large inter-lab differences observed in previous testing that would have supported the analysis. Logistical challenges hindered completion of a South Fork Nooksack River bacteria loading study. Homeowner consent was not obtained to allow installation of an autosampler on private property. Additionally, first-flush storm sampling proved to be challenging when optimal sampling windows occurred on weekends without staff availability.

Upcoming Activities and Next Steps

Building on lessons learned in Water Year 2025, staff will consider repeating the species composition analysis for samples with high bacteria levels. For the loading study, an autosampler will be installed at a public access site below the confluence of the upper forks of the Nooksack River, with additional South Fork sites evaluated. MST study results will be analyzed to support pollution source identification. The WCWP will continue to work with British Columbia partners through a coordinated water quality study in December 2025.



Total samples collected in 2025: 3,847



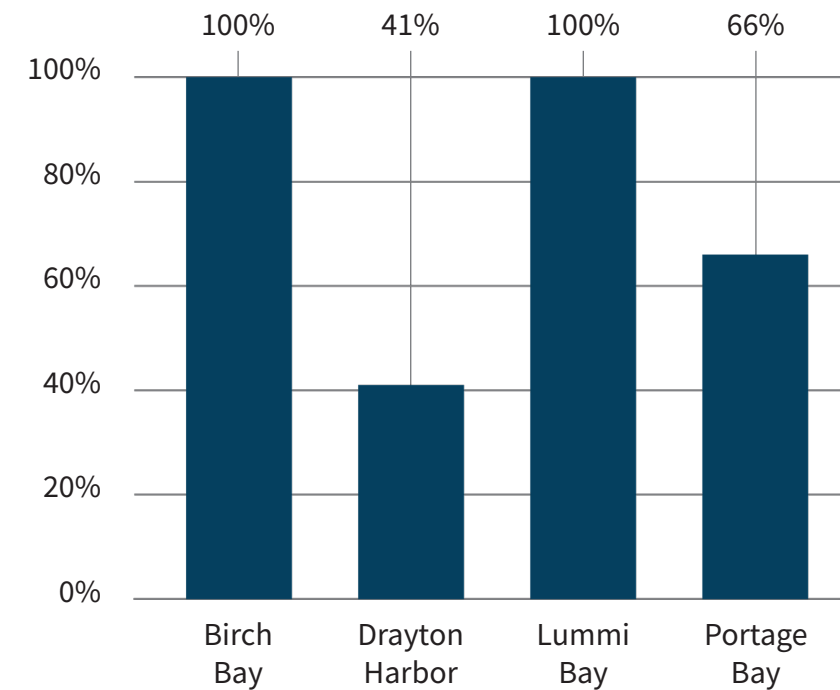
Water Quality Data and Monitoring Metrics

Metric	Value
Total number samples collected and uploaded to WCD master access database for Water Year 2025 (October 2024 – September 2025):	3,847
Water quality trends and current status:	Incorporated into watershed map (page 4-5)



Shellfish Growing Area Metrics

Percent of Growing Area Approved for Year-Round Harvest Out of Total Possible Acres



Data from Washington State Department of Health (DOH) Shellfish Growing Areas. Total possible area approvable is the total growing area minus acres designated by DOH as Prohibited due to things beyond the influence of the WCWP, such as proximity to waste water treatment plant outfalls and marinas. Data reflect current classification as of DOH's 2024 annual reporting cycle.

	Birch Bay	Drayton Harbor	Lummi Bay	Portage Bay
Total Growing Area Acres	4,202	3,724	4,724	1,541
Total Possible Area Approvable Acres	3,132	2,023	3,639	1,318
Total Acres Open For Harvest Year-Round (Approved)	3,132	832	3,639	876

Improving water quality requires the actions and behavior changes from individuals, organizations, and communities. Outreach is the tool used to disperse information and resources to help everyone keep water clean. The WCWP outreach team uses community events, social media, and mailings to bridge the gap between general awareness and adoption of specific stewardship actions. Combining efforts between agencies allows leveraging resources to attend more events and reach more people together than is possible from a stand-alone program.

Accomplishments and Successes

In Water Year 2025, collaborations flourished through cooperative trainings, increased outreach, and a special pet waste project. The team bolstered outreach to the Spanish-speaking community with Spanish language advertising and materials. In addition, work continued on cultural inclusivity projects. Messaging focused on appealing to audience priorities by featuring charismatic animals in social media campaigns, emphasizing pet health and home cleanliness, and integrating positive water quality practices in the Farm Speaker Series.

2025 Challenges and Circumstances

The WCWP also faced challenges in Water Year 2025 outreach efforts. Maintaining sufficient staffing for multi-day outreach events is an ongoing struggle. Engaging community organizations in adopting and sharing messaging had a low success rate, often due to constraints within those organizations. The program identified new initiatives for seasonal outreach such as recording an episode of the public works podcast and trying to connect with Whatcom County real estate agents. Actual implementation of these new initiatives during the fall outreach window proved difficult due to scheduling challenges and the time needed for development and approvals.

Upcoming Activities and Next Steps

In 2026, the outreach team will develop a centralized WCWP website and continue to adapt outreach messaging based on community response. Efforts will expand culturally inclusive outreach and strategically integrate new initiatives including developing outreach toolkits to share with partners and developing materials for new audiences. As new ideas for outreach activities are proposed, they will be continuously evaluated for their return on engagement, behavior change, and reach, with lower-benefit efforts scaled back. Data will continue to guide and refine outreach strategy development.



WCWP Active Contacts in Water Year 2025: 4,497

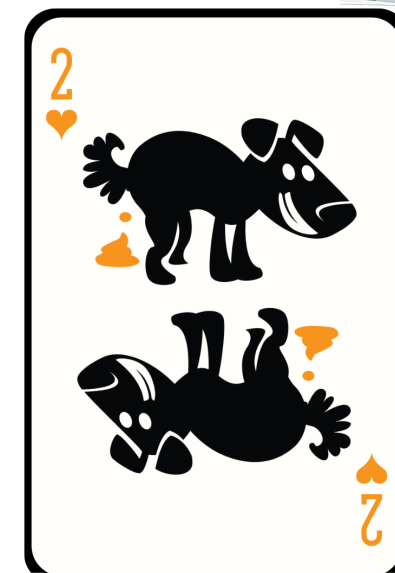


Metrics Highlight

Funding Source	Number of Active Contacts
WCWP Messaging: Non-NEP grant funded	1,664
WCWP Messaging: NEP grant funded	1,863
Pet Waste Outreach Special Project	970

Total Active Contacts 4,497

Active contacts are in-person interactions between WCWP and partner staff and members of the public, typically during outreach events and activities.



I SCOOP DEUCES
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Example of an incentive sticker for the pet waste program



Landowner engagement includes identifying properties that may negatively impact water quality and contacting landowners to offer resources, share concerns, and suggest solutions. Staff pro-actively seek potential sources of fecal bacterial pollution in priority watersheds. Enforcement may occur in instances where there is a significant public health concern and land managers refuse to take voluntary actions to resolve pollutant sources.

Accomplishments and Successes

High staff turnover and two vacancies in critical field staff positions in the previous water year prompted a need to re-build capacity and train new staff. Efforts focused on identifying new cases and following up on water quality hot spots and complaints. Ecology filled a key field staff position in late 2024, improving capacity for field work and landowner communication. Staff also developed a field staff training series covering case tracking, windshield surveys, effective communication, and best management practices on farms. In preparation for Water Year 2026, staff updated the process for reviewing sites with possible pollution sources and engaging those landowners. The WCWP revised its landowner letters to improve landowner response. Other accomplishments included updating the case tracking system and Geographic Information System (GIS) tools and developing new outreach materials to support the county's Conservation Program on Agricultural Lands (CPAL).

2025 Challenges and Circumstances

Staff turnover led to a loss of historical knowledge, creating questions and discrepancies in program processes and approaches to communicating with landowners. As a result, staff spent time discussing, rebuilding, and documenting clear procedures and strengthening alignment among partners. This investment should help the program achieve new levels of effectiveness and efficiency moving forward.

Upcoming Activities and Next Steps

In Water Year 2026, WCPW will use new tools and improved processes developed in 2025. Staff will use the updated flowchart for non-dairy agricultural landowners to inform decisions and pilot new education options. Updated landowner letters will help communicate water quality concerns and requested actions more clearly. The field staff training series will continue to increase knowledge sharing among program partners. We will also continue to pro-actively monitor for potential sources of fecal bacterial pollution in priority watersheds during the wet season.



New Farm Plans: 26
Total Farm Plans: 67



Metrics Highlight

	Water Year 2024	Water Year 2025
New Farm Plans	18	26
Total Farm Plans (new and updated)	40	67
BMPs installed	21	31

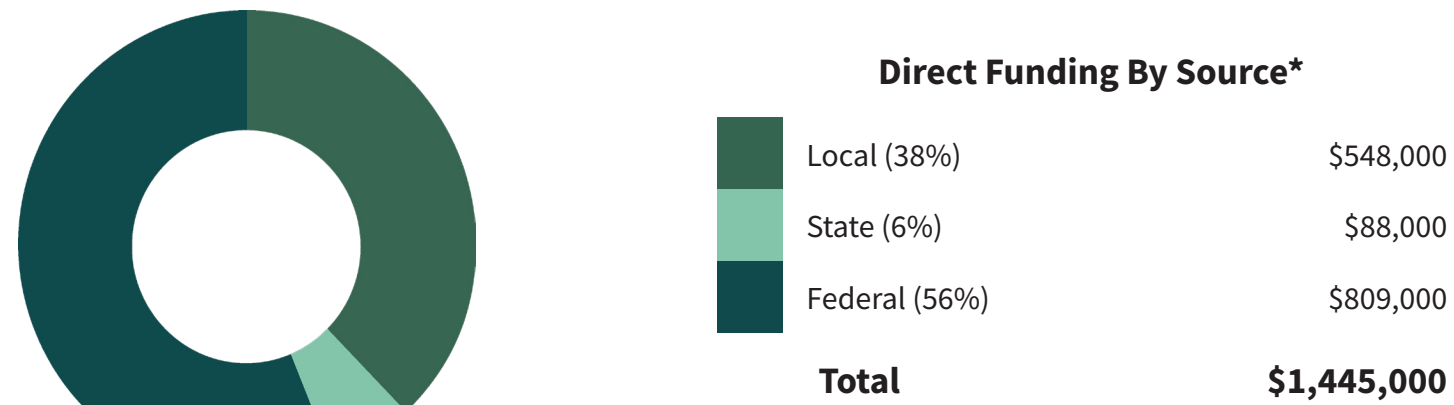
In Water Year 2025, 177 properties recieved a site visit.

Site visits include agricultural technical assistance and regulatory compliance visits. Farm plans are customized to meet the specific needs of each landowner and site. They include best management practices (BMPs) to improve farm health and protect natural resources. Number of BMPs installed is limited to landowner work reported to WCWP staff.



WCWP Staffing

Direct funding for the WCWP is provided by primary program partners from a mix of local (Whatcom County), state (Model Toxics Control Act Operating Fund and others), and federal (EPA’s National Estuary Program) sources. Direct support includes staff time, rebates and cost share assistance to landowners, outreach events and activities, water quality monitoring, vehicle/travel costs, and other activities necessary to support the program. Additional indirect support is provided by complementary city, county, and state programs.



Direct staff support for WCWP: 9+ full time employees.

* 2025 expenditures reported are a best estimate pulled from available data sources. Additional funding for direct support of the Whatcom Clean Water Program is provided by the State of Washington and other program partners.

Indirect support is equally important and demonstrates how funding for separate but complementary programs are leveraged to meet water quality objectives.

Indirect support for the WCWP comes from:

- Whatcom County Health and Community Services Environmental Health Solid Waste and On-Site Septic programs
- The City of Lynden
- The City of Ferndale
- Whatcom County storm water programs
- The Natural Resources Conservation Service Equity in Conservation program
- Washington State Department of Agriculture’s Nutrient Management Technical Services program
- Washington State Recreation and Conservation Office

Rebate and Cost Share Programs

Rebate and cost share programs help support adoption of stewardship behaviors and actions by reducing financial barriers. Timely completion of routine maintenance helps keep septic systems working well and prevents early failure. Higher rebate amounts are available for property owners meeting low income criteria. Offering higher rebate amounts to this group supports homeowners being able to complete routine maintenance as needed and stay in compliance with regulations.

Septic Maintenance Rebate Program

Standard and Assistance Rebate Dollars



Septic Maintenance Rebate Program	Standard Rebates	Assistance Rebates	All Rebates
Total Rebates Water Year 2025	187	63	250
Homeowner Contributions	\$59,576	\$15,852	\$75,428
Rebate Program Dollars	\$41,524	\$21,413	\$62,937
Landowner Cost Share	59%	43%	55%
Average Rebate	\$220	\$340	\$252
Leverage Ratio (Total Project Cost : Rebates Paid)	2.43	1.74	2.20

Small Farm Rebate Program

Total Rebates Water Year 2025	1
Homeowner Contributions	\$173
Small Farm Rebate Program Dollars	\$300
Landowner Cost Share	37%

Ag Cost Share Program

Total BMPs	6
Homeowner Contributions	\$12,010
Total Incentive Dollars	\$17,783
Landowner Cost Share	40.3%