



City of Poulsbo Stormwater Management Program 2022 Update

As Required by the Western Washington Phase II
Municipal Stormwater Permit
State of Washington Department of Ecology



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ACRONYMS

BMP	Best Management Practice
IDDE	Illicit Discharge Detection and Elimination
LID	Low Impact Development
MS4	Municipal Separate Storm Sewer System
O&M	Operations and Maintenance
SFDC	South Fork Dogfish Creek
SMAP	Stormwater Management Action Plan
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load

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The federal Clean Water Act (CWA) of 1972 establishes the basic structure for regulating discharges of pollutants into navigable waters and sets standards for water quality. In 1987, Congress amended the CWA to address stormwater. One of the mechanisms for achieving the goals of the CWA is the National Pollutant Discharge Elimination System (NPDES) permit program. In Washington state, the Environmental Protection Agency (EPA) has delegated authority of the NPDES to the Washington Department of Ecology (Ecology). Discharges to waters of the state, including lakes, rivers, ponds, streams, wetlands, and bays, are only allowable under a NPDES permit. The NPDES restricts the discharges allowed to surface water, enforces water quality monitoring, and contains other provisions that permittees must follow to prevent and reduce pollutants in stormwater. There are two types of NPDES permits. Phase I permits cover large and medium-sized municipality separate storm sewer systems (MS4), construction sites ≥ 5 acres, and major industrial sources. In 2000, the EPA finalized NPDES Phase II rules to regulate small MS4s, 1–5-acre construction sites, and some types of industrial activities. Phase II jurisdictions, such as Poulsbo (City), are those with populations less than 100,000 located within an urbanized area. The first Phase II Municipal Stormwater Permit for Poulsbo became effective on February 16, 2007, with a term of 5 years. Subsequent permits have been issued upon expiration of a previous permit. The current permit term is August 1, 2019, to July 31, 2024.

This document describes the *City of Poulsbo Stormwater Management Program - 2022 Update* (SWMP) as required under condition S.5 of the Western Washington Phase II NPDES Permit. The SWMP includes all activities and programs that the City of Poulsbo has implemented to reduce the discharge of pollutants to the City's MS4 and is updated annually. Together with the City's Comprehensive Stormwater Management Plan, the SWMP is used to aid the City in planning, funding, and implementing a comprehensive program for addressing various issues related to stormwater.

STORMWATER MANAGEMENT IN POULSBO

Poulsbo has a population of approximately 12,000 (2021 Washington State OFM data) and an area of approximately 4.6 square miles. Fish bearing creeks, including South Fork Dogfish, Lemolo, Johnson and Bjorgen, are fully or partially located within the City and drain to Liberty Bay. These creeks have historically supported populations of coho and chum salmon, as well as steelhead trout. Urbanization and a loss of rearing habitat has greatly decreased their populations ([see Appendix A](#)). Stormwater pollution is a significant

contributor of pollutants in both Poulsbo's creeks and Liberty Bay. Stormwater runoff carries pollutants from Poulsbo's streets, parking lots, construction sites, industrial and residential areas into Liberty Bay. Stormwater is one of the leading sources of pollution in Puget Sound and the NPDES permit is essential to restore water quality and protect beneficial uses of waterways like fishing and swimming.

The City established a dedicated funding mechanism for stormwater management with the creation of a stormwater utility in 1981. As part of the City's Comprehensive Plan, a Capital Improvement Plan (CIP) for stormwater is developed and routinely updated to address needed stormwater infrastructure improvements. The permit and the SWMP are administered under the supervision of the City Engineer, but multiple departments are involved in implementation. The Stormwater Operations and Maintenance Division of the Public Works Department manages and maintains the City's stormwater collection and conveyance system. The Engineering Department manages capital improvement projects as well as plan review and inspection of the construction of stormwater facilities associated with both public and private development. The Planning Department implements land use regulations that are related to stormwater management. Other permit elements, such as Illicit Discharge Detection and Elimination and Public Education and Outreach, are addressed by Public Works and Engineering. The City also cooperates and coordinates with neighboring jurisdictions and regional partners to maximize permit implementation opportunities and funding advantages.

The SWMP will continue to evolve to reflect future permit requirements, as well as current and planned activities. The inclusion of planned activities in the SWMP does not guarantee that they will be implemented exactly as described; however, the City of Poulsbo is committed to maintaining compliance with the permit through to the maximum extent possible with available funding and staff resources.

SWMP ELEMENTS

The permit requires the City to conduct activities and implement programs in the following areas:

- **Stormwater Planning:** Development of policies and strategies for water quality management to protect receiving waters.
- **Public Education and Outreach:** Programs that build general awareness, promote stewardship, and effect behavior change to reduce the impacts of stormwater runoff.

- **Public Involvement and Participation:** Opportunities for the public to be involved in the development and implementation of the SWMP.
- **Mapping:** Mapping of stormwater infrastructure within Poulsbo.
- **Illicit Discharge Detection and Elimination:** A program to detect and eliminate illicit connections and discharges to the MS4.
- **Controlling Runoff from New Development, Redevelopment, and Construction Sites:** Minimum requirements for private and public new development and redevelopment to reduce stormwater runoff impacts.
- **Operations and Maintenance:** Maintenance of stormwater facilities regulated by the City and regulation of private stormwater facilities.
- **Source Control for Existing Development:** A program that enforces the use of best management practices (BMPs) at all sites that are potential pollutant sources.
- **Monitoring and Assessment:** A collective fund for regional monitoring of SWMP effectiveness and source identification as well as water quality status and trends.
- **Total Maximum Daily Load Requirements (TMDL):** The City is subject to a TMDL for Liberty Bay watershed's fecal coliform level. The City must implement a plan that provides a framework for meeting TMDL requirements.

DOCUMENT ORGANIZATION

This document is organized to correspond with the sequence of permit requirements. Each Permit element is identified by title and Permit element number and is followed by an **overview** of the Permit requirements and the City's current and planned activities. Current activities may include ongoing activities that were implemented in previous years. For detailed permit requirements, please refer to the *Western Washington Phase II Municipal Stormwater Permit (Permit) 2019-2024*. The permit is available for viewing and downloading on the City of Poulsbo website:

<https://cityofpoulsbo.com/public-works-stormwater-management/>

or from the Department of Ecology website at:

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Municipal-stormwater-general-permits/Western-Washington-Phase-II-Municipal-Stormwater>

1. STORMWATER PLANNING

PERMIT REQUIREMENT S5.C.1

1.1 PERMIT REQUIREMENTS

Implement a Stormwater Planning program to inform and assist in the development of water quality management policies and strategies to protect receiving waters.

The minimum performance measures are:

- Convene an inter-disciplinary team to develop, implement, and influence the program.
- Coordinate with long-range plan updates to address and mitigate anticipated water quality impacts due to growth and transportation.
- Continue to require Low Impact Development (LID) principles and best management practices. Annually assess and document any newly identified administrative or regulatory barriers to LID implementation and the measures developed to address the barriers.
- Develop a Stormwater Management Action Plan (SMAP) which identifies at least one high-priority catchment area of focus for facility retrofits, land management strategies, and permit-based stormwater management actions. Identify implementation schedules, budget sources, changes needed to long-range plans, and a process and schedule for future assessment and feedback to improve the planning process and implementation of procedures or projects.

1.2 CURRENT ACTIVITIES

The City's stormwater team works to meet permit requirements and consists of the NPDES coordinator, city engineer, utility engineer, public works superintendent, and water quality technician. The team works with other departments including planning as well as consultants, as needed.

The 2024 Comprehensive Plan Update has begun in accordance with the Washington State Growth Management Act (GMA) under RCW 35.63. The Comprehensive Plan provides a framework for growth of the City that considers the environment and economic development. The Plan includes capital facilities, stormwater utility elements, and development standards that support permit requirements.

By considering monitoring data, current and future land use, and receiving waters, the SMAP has identified South Fork Dogfish Creek (SFDC) as a high-priority basin(See **Appendix B**). The South Fork Dogfish Creek basin is entirely located within the City’s MS4. The basin has historically supported runs of chum and coho salmon, however, insufficient stormwater treatment and urban development has degraded habitat conditions and water quality.

1.3 PLANNED ACTIVITIES

Stormwater retrofits, public education and outreach, source control, and enhanced operations and maintenance are considered in the SMAP to improve water quality in the South Fork Dogfish Creek basin. These land management and development strategies, along with financial planning, will be used to guide future capital projects and permit compliance. The 2024 Comprehensive Plan update will provide further direction for low impact development and capital planning to maintain permit compliance as the City grows.

2. PUBLIC EDUCATION AND OUTREACH

PERMIT REQUIREMENT S5.C.2

2.1 PERMIT REQUIREMENTS

Develop a stormwater education and outreach program that builds general awareness about methods to address and reduce impacts from stormwater runoff, effect behavior changes to reduce practices that contribute to adverse stormwater impacts and create stewardship opportunities that encourages community engagement. Permittees may choose to meet these requirements individually or as a member of a regional group, however the program design shall be based on local water quality information and target audiences to identify high priority target audiences, subject areas, and/or BMPs.

The minimum performance measures are:

- Annual selection of at least one target audience and one subject area for a general awareness campaign.
- Annual selection of at least one target audience and one subject area for a campaign to affect behavior change.
- Behavior change campaigns must use social marketing practices and methods to tailor the campaign to Permittee's community. The campaigns shall be evaluated to determine its effectiveness and develop recommendations for improvement. Evaluations of the campaigns must be utilized to improve the campaign, or if desired, develop a new target audience and/or behavior change campaign.
- No later than March 31st, 2024, the permittee shall evaluate and report the changes in understanding and adoption of target behaviors as well as any planned or recommended changes to the campaign in order to be more effective. Evaluation must be used to direct effective strategies in the ongoing behavior change campaign.
- Permittees must provide and advertise stewardship opportunities and/or partner with existing organizations to encourage resident to participate in activities or events planned and organized within the community, such as: stream teams, storm drain marking, volunteer monitoring, riparian plantings, and educational activities.

2.2 CURRENT ACTIVITIES

General Awareness and Behavior Change

The cities of Poulsbo, Bainbridge Island, Port Orchard, Bremerton, Gig Harbor, and Port Angeles partnered with Kitsap County to create the West Sound Stormwater Outreach Group (WSSOG). WSSOG provides a mechanism to pool resources for the development, implementation, and funding of stormwater education and outreach. This partnership creates consistent messaging across city and county boundaries, while also increasing municipal resource efficiency and cost savings. WSSOG fulfills multiple permit requirements through our public education and outreach campaigns, including:

- **Natural Yard Care Campaign:** This new behavior change program was created after WSSOG evaluated its “Pet Waste at Home” pilot program and decided to not move forward with the campaign. In 2021, the Natural Yard Care Campaign was piloted in Poulsbo (**See Appendix C**). The program aims to reduce synthetic fertilizer use by hosting natural yard care webinars with Master Gardeners and providing a coupon for a natural fertilizer. The target audience of the campaign are families with kids/and or pets who live in single family homes or townhouses and perform their own yard maintenance. The 2021 pilot reached 23,131 people on Facebook, which generated 1,177 link clicks, 68 webinar registrations, 35 webinar attendees, and 18 coupons redeemed in store. In spring of 2022, the program will be expanded to other jurisdictions in WSSOG.
- **“Mutt Mitt” Program:** In this behavior change program, stations dispense pick-up bags for dog waste (**See Appendix C**). The city owns and maintains stations in its parks, but stations can also be sponsored by volunteers such as neighborhood groups, homeowner’s associations, apartment complexes, and marinas. There are currently 49 volunteer stations, 15 city-owned stations, and 5 private stations in Poulsbo.

Kitsap County represents the City of Poulsbo and other WSSOG members at the Puget Sound STormwater Outreach for Regional Municipalities (STORM). STORM is a partnership of over 80 Puget Sound area cities with the goal of addressing polluted stormwater runoff. STORM created the broad-reaching Puget Sound Starts Here (PSSH) media campaign. The PSSH campaign raises general awareness of stormwater pollution as well as targets behavior changes for the people who live and work in the Puget Sound. Targeted behavior changes include the Don’t Drip and Drive Campaign, natural yard care, car washing, and pet waste. By pooling resources with other Puget Sound cities, the PSSH campaigns ensures that regional stormwater outreach is effective, consistent, and cost-efficient.

The 2021 PSSH media campaign was held in September- October and included ads on social media, print and digital media, movie theaters, television, and signage on buses and ferries throughout the Puget Sound. Education and outreach materials are presented to varied audience types and activities that may affect water quality. PSSH branded giveaways such as pet waste leash bag dispensers, paint sticks, coasters, and coffee sleeves are also utilized by the City and available to the public.

To effect behavior change at businesses, the City cooperates with the Pollution Prevention Assistance (PPA) program of the Kitsap Public Health District. The PPA program provides technical assistance to businesses to incorporate BMPs that prevent pollution and responsibly manage waste.

Stewardship

An ongoing Inter-Local Agreement (ILA) with the Kitsap Conservation District allows collaboration with the City when opportunities arise for local stewardship activities and engagement with the public.

The City of Poulsbo Tree Board and the Fish Park Steering Committee provide multiple opportunities for community involvement and stewardship with a focus on tree planting and landscape mitigation in both upland and riparian locations. In November 2021, Poulsbo's Fish Park was part of Kitsap's Salmon Tours, giving citizens the opportunity to view migrating salmon and cutthroat trout as well as take part in interactive activities that educates participants in environmental protection and water quality issues.

2.3 PLANNED ACTIVITIES

The City will continue to be involved in the PSSH Campaign, STORM, WSSOG, and stewardship activities throughout the city. Further stewardship activities will be considered as opportunities and funding allows.

The 2022 WSSOG work plan includes sustaining successful efforts in the Pet Waste outreach and spills hotline as well as expansion of the Natural Yard Care campaign. The 2022 Natural Yard care Campaign will include 4 webinars on lawn alternatives and nature friendly gardening for beginners. Coupons for discounted organic fertilizer will be available to webinar participants and through sponsored Facebook ads. Coupons can be redeemed at 5 participating retailers. Success of the program will be measured by webinar attendees, coupon redemptions, and post-webinar follow-up surveys. WSSOG plans to hire a consultant to evaluate outreach programs, including the Natural Yard Care Campaign, to identify shared strategies and increase participation of underserved communities.

3. PUBLIC INVOLVEMENT AND PARTICIPATION

PERMIT REQUIREMENT S5.C.3

3.1 PERMIT REQUIREMENTS

Permittees shall provide ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participation in developing rate-structures or other similar activities. Each Permittee shall comply with applicable state and local public notice requirements when developing elements of the SWMP and SMAP.

The minimum performance measures are:

- Creating opportunities for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation, and update of the Permittee's SMAP and SWMP.
- Each Permittee shall post on their website their SWMP Plan and the annual report no later than May 31 each year. All other submittals shall be available to the public upon request.

3.2 CURRENT ACTIVITIES

Opportunities for citizen comments are available at meetings of the City Council, Planning Commission, Public Works Committee (a sub-committee of City Council members and staff), Open House Meetings and Stakeholder Meetings. Public hearings are held for any legislative actions such as proposed rate structure revisions and Comprehensive Plan updates. The annual report, SWMP, and Comprehensive Land Use Plan are posted on the City's website and a comment form is posted with the SWMP.

3.3 PLANNED ACTIVITIES

All current activities in section 3.2 are planned to continue. Additional opportunities that may arise will be supported when appropriate and when funding, staffing, and partner resources are available.

4. MAPPING AND DOCUMENTATION

PERMIT REQUIREMENT S5.C.4

4.1 PERMIT REQUIREMENTS

An ongoing program for mapping and documenting the MS4.

The minimum performance measures are:

- Permittees must map known MS4 outfalls, discharge points, receiving waters, stormwater facilities owned or operated by the permittee, tributary conveyances larger than 24 inches in diameter to all known outfalls and discharge points, associated drainage areas and land use, connections between the permittee's MS4 and other municipalities, and all connections to the MS4 made after February 16th, 2007, that has been authorized by the permittee.
- No later than August 1st, 2023, permittees must complete mapping of all known connections from the MS4 to a privately owned stormwater system.

4.2 CURRENT ACTIVITIES

Mapping requirements have been completed, including all known connections from the MS4 to privately owned stormwater systems. Existing maps are updated as necessary to include mapping new infrastructure and revising incorrect information. Mapping data is collected and stored using asset management software.

4.3 PLANNED ACTIVITIES

All current activities in section 4.2 are planned to continue. Updates to existing maps will be performed to include new infrastructure and revise incorrect information as it is discovered.

5. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

PERMIT REQUIREMENT S5.C.5

5.1 PERMIT REQUIREMENTS

Develop and implement an ongoing program designed to prevent, detect, characterize, trace, and eliminate illicit connections and discharges into the MS4.

The minimum performance requirements are:

- Develop procedures for reporting, correcting, and/or removing illicit connections, spills, and other illicit discharges when they are suspected or identified. Pollutants entering the MS4 from an interconnected, adjoining MS4 must also be addressed. Illicit connections and discharges must be identified through field screening, inspections, complaints/reports, construction inspections, maintenance inspections, source control inspections, and/or monitoring information.
- Inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper waste disposal.
- Permittees must implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the Permittee's MS4. The ordinance or regulatory mechanism must include escalating enforcement procedures and actions.
- Implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections. The program must include procedures for conducting illicit discharge investigations, a field screening methodology appropriate to the characteristics of the MS4 and water quality concerns, an ongoing training program for all staff who might come into contact or observe an illicit discharge as part of their normal job responsibilities, and a publicly listed and publicized spill hotline.
- Implement an ongoing program designed to address illicit discharges into the MS4 which includes procedures whose actions meet timelines described in the Permit. The program must include procedures for tracing and elimination of the source of an illicit discharge.

- Track and maintain records of the activities conducted to meet the specific reporting requirements to Ecology for this permit section.

5.2 CURRENT ACTIVITIES

Reports of spills and illicit discharges are investigated, and appropriate actions are taken depending on the nature of the event. The IDDE ordinance (PMC 13.18) provides a mechanism for enforcement on illicit dischargers and incidents are documented and tracked. The telephone hotline Kitsap1 (360-337-5777) is advertised throughout Kitsap County for reporting illicit discharges and spills. The City has also partnered with Kitsap County's SeeClickFix program. Reports of spills and illicit discharges within the City's MS4 that are reported to SeeClickFix or Kitsap1 are immediately forwarded to the City.

City employees are trained to be able to identify and report illicit discharges. New, additional, and refresher training is provided when appropriate. Program guidance is provided by the Illicit Connection and Illicit Discharge Field Screening and Tracing Guidance Manual, prepared by Herrera Environmental Consultants. Additional field screening is implemented as required by the permit and is ongoing in association with the operations and maintenance (O&M) program for municipal facilities. Public employees, businesses, and the general public are informed of hazards associated with illegal discharges and improper disposal of waste in accordance with permit requirements.

To assist in detecting illicit discharges, the City has had an Inter Local Agreement (ILA) with Kitsap Public Health District since 2009 to perform water quality sampling. Screenings were originally only performed at outfalls during dry-weather but in 2015, after the creation of the TMDL (Total Maximum Daily Load) Implementation Plan for fecal coliform, two additional annual wet-weather screenings were added to the program. The TMDL plan also initiated stream sampling during all 3 rounds of yearly sampling. In 2018, in partnership with the EPA Manchester Laboratory and Kitsap Public Health District, a microbial source tracking (MST) project was conducted. Samples were taken in 2018 and 2019 to determine what types of Fecal Coliform bacteria were present at various locations in the city. The results analyzed human, ruminant (cattle, deer, etc), avian (birds) and canine fecal pollution levels. This allowed the City to assess conditions and sources which would influence how bacterial reduction efforts are directed.

To fulfill the permit requirement to detect and eliminate illicit connections and discharges from commercial properties and private stormwater facilities, the Private Facility Maintenance (PFM) program was created with assistance from the Kitsap Public Health

District. The PFM program requires owners of private stormwater facilities to inspect and maintain their facilities. Records of inspections and maintenance must be turned into the City annually. Under the NPDES permit, private stormwater facilities permitted after February 16th, 2010 must comply with this requirement. Poulsbo's PFM program exceeds the permit requirement by requiring inspection and maintenance for all commercial properties.

The City actively plans and budgets for capital improvement projects which will improve water quality in local streams and Liberty Bay. Grant funds to help initiate projects as soon as feasible are also sought out by the City. In general, one or more projects are in the planning, design, or construction stage each year.

5.3 PLANNED ACTIVITIES

The program elements outlined in 5.2 will be maintained, reviewed, and refined as appropriate. The City will continue to advertise the Kitsap1 hotline and provide illicit discharge training new employees (Section 2.2).

6. CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES

PERMIT REQUIREMENT S5.C.6

6.1 PERMIT REQUIREMENTS

Implement and enforce a program to reduce pollutants in stormwater runoff to the municipal stormwater system from new development, redevelopment, and construction site activities. The program shall apply to private and public development, including transportation projects.

The minimum performance measures are:

- Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects no later than June 30th, 2022. This includes legal authority to inspect and enforce maintenance standards for private stormwater facilities that discharge to the Permittee's MS4. Records of inspections and enforcement must be kept.
- The permitting process must include site plan review, enforcement capabilities, and inspections before, during, and after construction.
- Permittees must verify that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater treatment and flow control BMPs/facilities.
- Electronic *Construction Stormwater General Permit* Notice of Intent (NOI) form and *Industrial Stormwater General Permit* NOI must be available to representatives of proposed new development and redevelopment. Permittees must continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permit issued by Ecology.
- All staff whose primary job duties are implementing this section's program must be trained to conduct these activities. Follow-up training must be provided as needed.

6.2 CURRENT ACTIVITIES

The City's permitting process includes plan review, inspection, and enforcement capabilities in accordance with the permit. The *2012 Stormwater Management Manual for Western Washington, as Amended in 2014* (2014 SWMMWW) is codified in city ordinance and is used to protect water quality and reduce the discharge of pollutants to the MS4 during development. Developers must use the 2014 SWMMWW to apply all known, available, and reasonable methods of prevention, control, and treatment (AKART) during site planning, BMP selection and design, and Low Impact Development (LID) competing needs criteria.

Site plans are reviewed for the elements above to ensure that appropriate BMPs are selected and designed to the maximum extent practicable. Employees implementing permit requirements have training on erosion control, construction inspections, low impact development techniques, and stormwater design standards and practices. Appropriate staff are also Construction Site Erosion and Sediment Control Lead (CESCL) certified. The City maintains records of inspections, enforcement, and maintenance activities.

Maintenance responsibility, standards, inspection requirements, and procedures for long term operation and maintenance of permanent stormwater control facilities is codified in City ordinance. The Private Facility Maintenance program (PFM) supports this effort by requiring commercial properties to inspect, their stormwater facilities, perform maintenance as required, and submit documentation to the City.

6.3 PLANNED ACTIVITIES

The activities described in section 6.2 will be continued as required by the permit, with refinements and adjustments made as necessary. The City is in the process of adopting the *2019 Stormwater Management Manual for Western Washington*, which contains updated implementation and guidance for controlling runoff during development and redevelopment.

7. OPERATIONS AND MAINTENANCE

PERMIT REQUIREMENT S5.C.7

7.1 PERMIT REQUIREMENTS

Implement a program to regulate and conduct O&M activities to prevent or reduce stormwater impacts.

The minimum performance measures are:

- Implement maintenance standards that are as protective, or more protective, of facility function than those specified in the *2014 SWMMWW*.
- For stormwater facilities owned or operated by the Permittee:
 - Implement a program to annually inspect all municipally owned or operated stormwater treatment and flow control BMPs/facilities and take appropriate maintenance actions.
 - Spot check potentially damaged stormwater treatment and flow control BMPs/ facilities after major storm events and take appropriate maintenance actions.
 - Inspect all catch basins and inlets owned or operated by the Permittee every two years. Clean as needed for compliance with maintenance standards.
- For stormwater facilities regulated by the Permittee:
 - Verify adequate long-term maintenance of stormwater facilities by implementing an ordinance or other enforceable mechanism that clearly identifies the party responsible for maintenance, requires annual inspection of facilities, and establishes enforcement procedures.
- By December 31st, 2022, document the practices, policies, and procedures implemented to reduce stormwater runoff from lands owned or maintained by the permittee.
- Conduct a training program for employees whose primary job functions may impact stormwater quality. Training shall address the importance of protecting water quality, operation and maintenance standards, relevant Stormwater Pollution Prevention Plans (SWPPP), selecting appropriate BMPs, ways to perform job

activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns.

- Create a SWPPP for all heavy equipment maintenance and storage yards, and material storage facilities owned or operated by the Permittee. SWPPPs must be updated no later than December 31st, 2022.
- Records of activities conducted to meet requirements of this section must be maintained.

7.2 CURRENT ACTIVITIES

In 2021, the City:

- Inspected 1329 catch basins
- Cleaned 253 catch basins
- Inspected 260 Stormwater facilities/ BMPs
- Maintained 33 Stormwater facilities/BMPs

The City takes steps to minimize pollutants in runoff from City activities and on land owned or operated by the City. The maintenance standards specified in the *2014 SWMMWW* is referenced for all applicable City activities. A SWPPP is in place for all heavy equipment maintenance or storage yards as well as material storage facilities owned by the City. Records of inspections, maintenance, and repair activities are maintained.

Long-term operation and maintenance of permanent stormwater control facilities is codified in City ordinance. Maintenance responsibility, standards, inspection requirements, and procedures are addressed. Annual inspections and maintenance are required under the Private Facility Maintenance (PFM) program.

7.3 PLANNED ACTIVITIES

Activities performed on lands owned or maintained by the City will be evaluated for their contribution to run-off pollution. Reduction practices will be established as necessary and documented by the permit requirement date of December 31st, 2022. Activities such as, but not limited to, street cleaning, snow and ice control, utility installation, pavement striping maintenance, dust control, application of pesticides, sediment and erosion control, landscape maintenance, trash management, and stormwater conveyance maintenance will be addressed.

8. SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT

PERMIT REQUIREMENT S5.C.8

8.1 PERMIT REQUIREMENTS

Implement a program to prevent and reduce pollutants in runoff from areas that discharge to the MS4. The program must require the application of BMPs to pollutant generating sources associated with existing land uses and activities. Applicable sites include publicly and privately owned institutional, commercial, and industrial sites.

The minimum performance measures are:

- No later than August 1st, 2022, adopt and make effective an ordinance or other enforceable documents which requires the application of source control BMPs for pollutant generating sources associated with existing land uses and activities described in Permit Appendix 8.
- All pollutant generating sources shall be required to implement all applicable source control BMPs. Structural source control BMPs or treatment BMPs/facilities may be required if operational source control BMPs do not prevent illicit discharges or violations of surface water, groundwater, or sediment management standards.
- An inventory that identifies publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4 must be established by August 1st, 2022.
- No later than January 1st, 2023, Permittees shall begin the inspection program requiring application of BMPs at identified pollutant generating sites. The inspection program shall include:
 - Notification to all sites in the inventory about activities that may generate pollutants and source control requirements.
 - Annual inspections equal to 20% of the sites listed in the source control inventory. Follow-up compliance inspections at the same site, as well as inspections conducted after credible complaints, may be counted towards the 20%. It is not required to inspect 100% of sites within a 5-year period.
 - All sites identified through credible complaints will be inspected.
 - Enforcement of sites that fail to adequately implement BMPs after a follow-up inspection.

- Retention of records to demonstrate an effort to bring sites into compliance, including documentation of each site visit, inspection reports, warning letters, notices of violations, and any other enforcement records.
- Training for staff responsible for implementing the source control program to conduct these activities.

8.2 CURRENT ACTIVITIES

Poulsbo Municipal Code (PMC) chapter 13.18 requires all properties within the City to implement BMPs and prevent non-stormwater discharges. There is also a progressive enforcement policy in place for violations of the chapter. As it stands, chapter 13.18 is compliant with the permit requirements. However, the City is currently amending 13.18 to provide consistency of the code with permit language and with surrounding municipalities own source control sections. These changes will create a more easily understandable code for all applicable sites, especially for entities that operate in multiple jurisdictions within Kitsap County. Site inventory development is underway and will be refined as needed to be finished before the permit deadline of August 1st, 2022.

8.3 PLANNED ACTIVITIES

The City participates in Washington Stormwater Center's Business Inspection Group (BIG). BIG is a regional business inspection group comprised of NPDES permittees that share information and collaborate on topics surrounding source control business inspections and new permit requirements. Using funding from the Stormwater Action Monitoring Program (SAM), BIG is creating a source control program guidance manual and training to assist phase II permittees in creating an inspection program. The manual will address ordinance adoption for the source control program, inventory development, creating an inspection program, implementing a progressive enforcement policy, and staff training. The City will be using these resources to inform the creation of our source control program in accordance with the permit requirements and associated deadlines. The manual created by SAM will be adapted to fit the unique needs of the City and will be used for new and ongoing employee training.

9. TOTAL MAXIMUM DAILY LOAD REQUIREMENTS (TMDL)

PERMIT REQUIREMENT S7

9.1 PERMIT REQUIREMENTS

The Total Maximum Daily Load (TMDL) is a water quality improvement project to clean up polluted waters to meet state water quality standards. The federal Clean Water Act requires a TMDL plan for each waterbody on Washington State's polluted waters list, known as the 303(d) list. NPDES Permittees may be subject to applicable TMDLs for stormwater discharges from their MS4. For applicable TMDLs listed in Appendix 2 of the permit, affected Permittees shall comply with the specific requirements. For TMDLs not listed in Appendix 2, including Poulsbo's TMDL, compliance with the Permit constitutes compliance with those TMDLs.

9.2 CURRENT ACTIVITIES

In 2013, Ecology prepared the *Liberty Bay Watershed Fecal Coliform Bacteria TMDL and Water Quality Implementation Plan* due to evidence of bacterial contamination affecting beneficial uses in Liberty Bay, including shellfish harvesting and primary contact recreation. The City's TMDL is currently not ordered in the NPDES permit. However, the City has taken proactive steps to implement TMDL standards.

In 2016, the City received a grant from the Department of Ecology to develop an implementation plan for the purpose of providing a framework for meeting TMDL requirements. The plan is available on the City's website (<https://cityofpoulsbo.com/wp-content/uploads/2017/04/libertybayTMDLplan.pdf>) and includes assessments of the watershed in order to determine the needs and opportunities for improving water quality in Liberty Bay. To reach this goal, the TMDL plan outlines effectiveness monitoring, capital improvements, financing, and operations and maintenance.

The TMDL focuses on IDDE efforts in the MS4 upstream of Liberty Bay sampling sites with Load/Waste Load Allocations. To support the TMDL, the City has undertaken the following actions:

- Doubled the frequency of catch basin inspections as a result of the requirements under the 2019-2024 NPDES permit.
- Conducted stormwater public outreach and education centered around Liberty Bay watershed pollution sources, as described in Section 2 of this document.

- Encouraged local stewardship and engagement with the public on pollution prevention practices through an ongoing Inter-Local Agreement (ILA) with the Kitsap Conservation District.
- Active seeking of supplemental grant funding to implement more capital improvement projects that support pollution prevention and habitat restoration/enhancement.

In response to the State requirement for managing the growth and development of the City, the Planning Department identified areas which require ecological protection. Maps have been developed and adopted for critical aquifers, geological hazards, fish and wildlife habitat conservation ([See Appendix A](#)), wetlands, and shoreline. The adopted codes and maps support the TMDL requirement to identify areas with high potential to contribute bacteria and sediment to nearby surface waters and provide incentives for avoiding development in those areas and eliminating impacts to surface waters.

The effectiveness of the City's pollution prevention practices is investigated through water quality sampling each year; once during the dry season and twice during specific wet weather conditions. A Microbial Source Tracking (MST) project in 2018-2019 coincided with the annual water quality sampling rounds and was used to provide additional direction for IDDE efforts.

In collaboration with Clean Water Kitsap and the Suquamish Tribe, the Liberty Bay growing area was re-established and 760 acres of shellfish beds were reopened in 2017 for the first time in several decades ([See Appendix D](#)).

9.3 PLANNED ACTIVITIES

The City will continue to support and develop a multi-faceted approach to meeting TMDL requirements. The Source Control Program (permit requirement S5.C.8) will prioritize businesses that have the potential to discharge fecal coliform bacteria, including restaurants or facilities that dispose of food waste in outdoor trash containers. The City will continue to explore opportunities in the Liberty Bay watershed to encourage citizen stewardship of the environment. Capital improvement projects which produce water quality benefits will be developed and implemented. To support these efforts, the City actively seeks supplemental grant funding for capital improvement projects.

PERMIT REQUIREMENT S8

10.1 PERMIT REQUIREMENTS

To meet this permit requirement, permittees must implement stormwater monitoring assessment either individually or by paying into a collective fund to support regional monitoring in association with other permittees. Monitoring shall address for (1) Status and Trends and for (2) SWMP Effectiveness and Source Identification.

10.2 CURRENT ACTIVITIES

The City of Poulsbo pays annual fees into the collective fund for regional monitoring to be performed on its behalf. The collective, called the Stormwater Action Monitoring (SAM) group, conducts effectiveness studies, records water quality status and trends, and investigates regional solutions for source control.

10.3 PLANNED ACTIVITIES

The City will continue its participation in the regional collective. The 2022-2023 SAM workplan includes:

- Overseeing the use of pooled resources to implement regional monitoring
- Exploring stormwater management needs, research questions, and BMPs to address 6PPD-quinone
- Developing and implementing a process to select effectiveness and source identification sources
- Guiding status and trend monitoring studies

11.1 RESOURCES AND REQUEST FOR COMMENTS

The current annual report, SWMP, SWMP comments form, and Phase II NPDES permit can be viewed on the Public Works stormwater management page of the City's website at:

<https://cityofpoulsbo.com/public-works-stormwater-management/>

The public is encouraged to participate in the development of the SWMP. Please contact the Public Works Department with questions, comments, or suggestions. Comments may be submitted at any time.

11.2 CONTACT INFORMATION

Mail: City of Poulsbo Public Works | 200 NE Moe Street | Poulsbo, WA 98370

Phone: 360-779-4078

E-mail: publicworks@cityofpoulsbo.com

Website: www.cityofpoulsbo.com

11.3 APPENDICES OVERVIEW AND CREDITS

Appendix A: Poulsbo's Fish and Wildlife Conservation Area (Source: Washington Department of Fish and Wildlife)

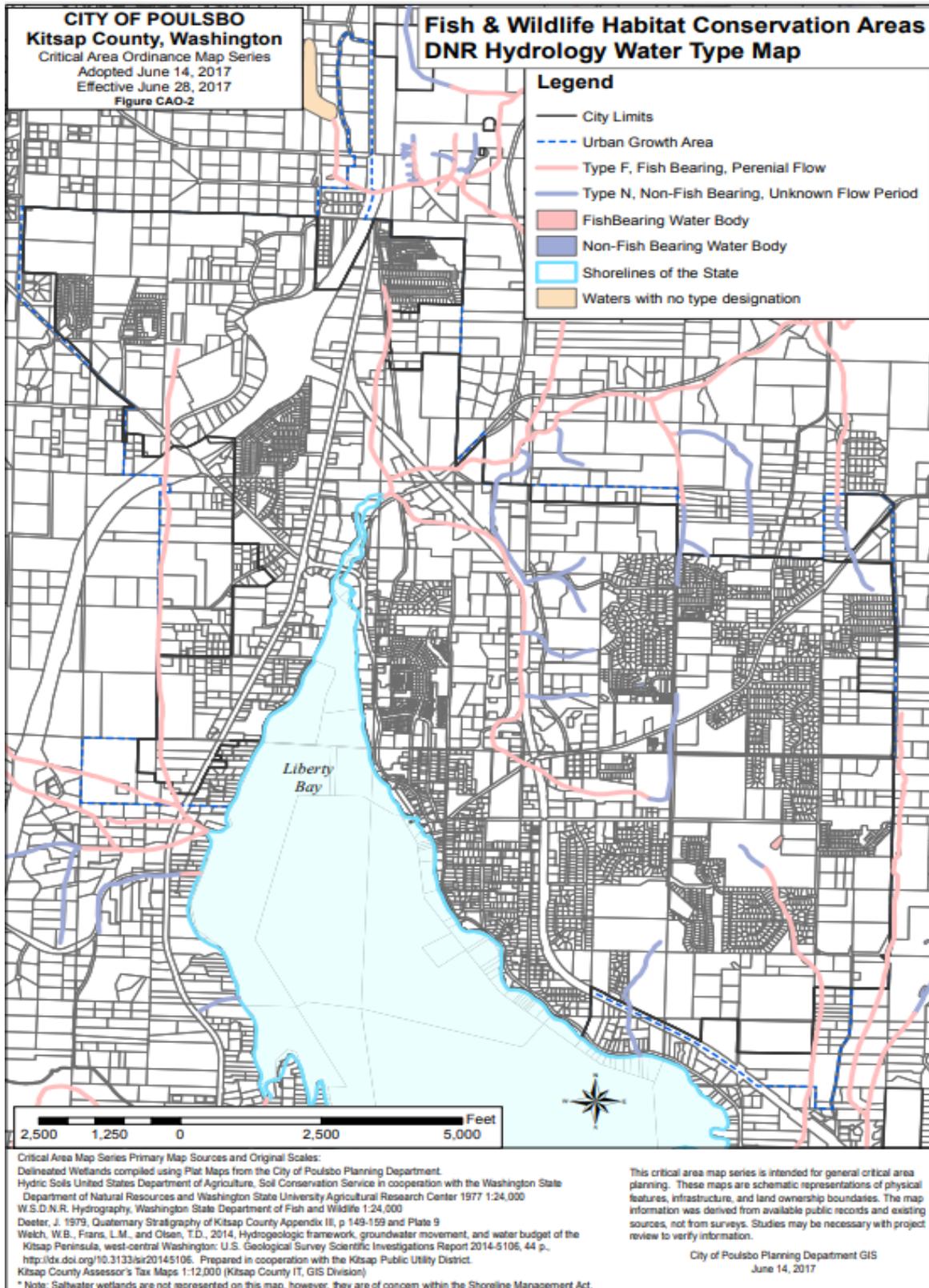
Appendix B: Stormwater Basins in Poulsbo (Source: Poulsbo Draft SMAP)

Appendix C: WSSOG Public Education and Outreach Campaigns (Source: WSSOG)

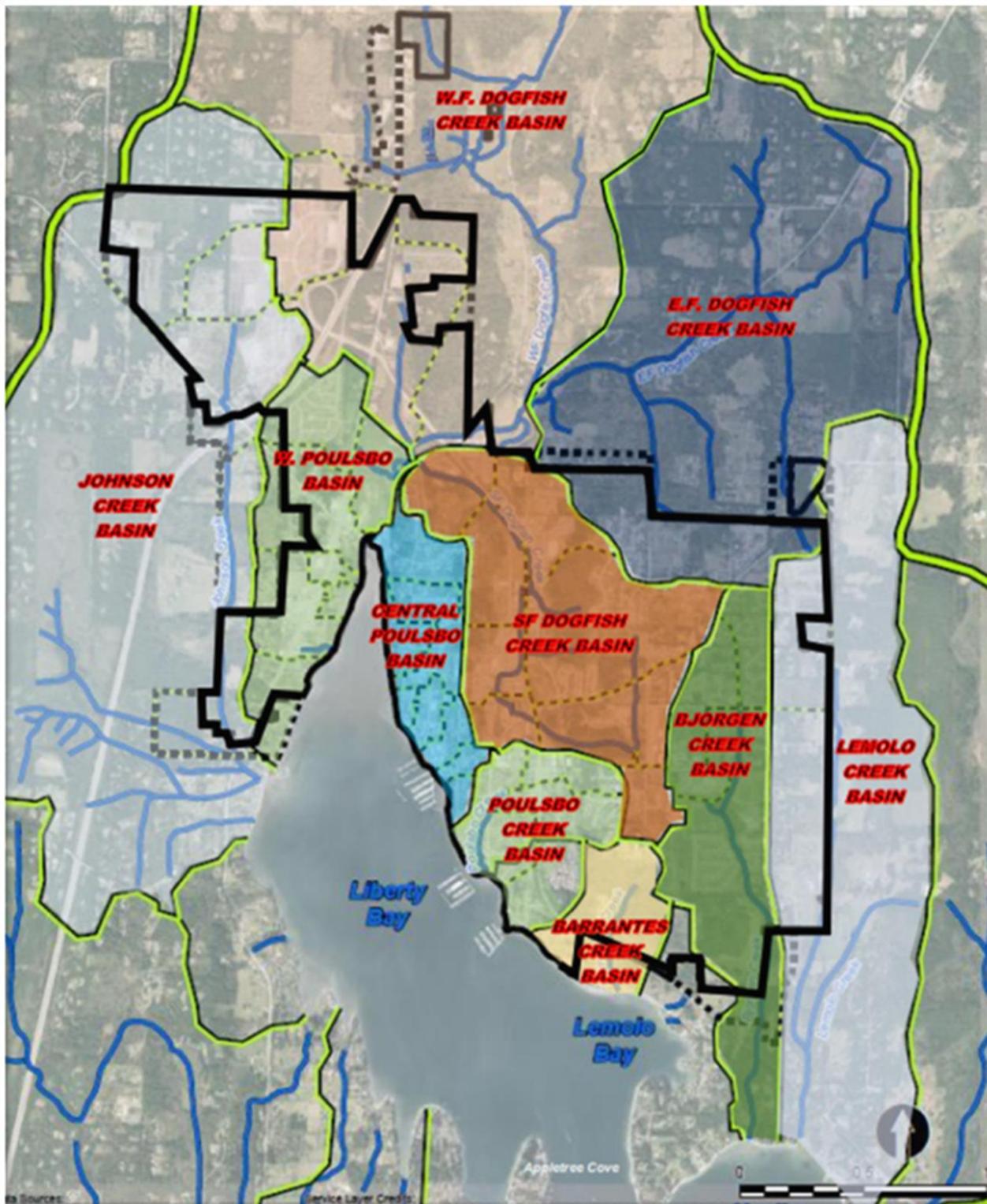
Appendix D: Shellfish Harvesting Areas in Liberty Bay (Source: Washington Department of Health)

Front cover picture courtesy of Poulsbo Parks and Recreation Department

APPENDIX A: POULSBO'S FISH AND WILDLIFE CONSERVATION AREAS



APPENDIX B: BASINS IN POULSBO CITY LIMIT



ORGANIC FERTILIZER



Natural Yard Care Campaign 2021 Messaging



Private Mutt Mitt Station Installed in 2021

APPENDIX D: SHELLFISH HARVESTING AREAS IN LIBERTY BAY

