

City of Bainbridge Island – Public Works

2018 Phase II Municipal Stormwater Permit Plan (SWMP) and Standard Operating Procedures (SOPs)
Permit # WAR045503

Updated: January 1, 2018

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Public Works / Stormwater Management Program Plan and Standard Operating Procedures

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Executive Summary

The Stormwater Management Program (SWMP) is a comprehensive program plan designed to reduce the discharge of pollutants from the City of Bainbridge Island's MS4 (Municipal Separate Storm Sewer System) in order to restore and protect beneficial uses of the waters of the State. The SWMP resides in and is administered by the City's Water Resources Program under the direction and management of the Public Works Director, but its implementation, direction and guidance is applied across almost all City departments including Public Works Engineering and Operations and Maintenance, and Planning and Community Development. The Public Works Director provides the necessary oversight to ensure that permit requirements are satisfied.

The City of Bainbridge Island (the City) Stormwater Management Program Plan and Standard Operating Procedures Manual was prepared to meet permit requirements set by the Washington State Department of Ecology (Ecology) in the Western Washington Phase II Municipal Stormwater Permit (Permit), and to describe the standard operating procedures to meet various permit / program requirements. The intent of this Manual is to create the SWMP and establish procedures to allow the City to comply with both Permit / Program requirements and the most recent Stormwater Management Manual for Western Washington (SWMM). Where City requirements are more stringent than Permit requirements, the City standards will apply. Records of activities will comprise a portion of the Annual Report submitted to Ecology to verify compliance with the conditions of the City's Permit in accordance with Permit requirements.

Funding, for SWMP and other elements of the City's stormwater management effort, is obtained through user fees from the City's Surface and Stormwater Utility. This enterprise funding is codified in the Storm and Surface Water Utility, Bainbridge Island Municipal Code 13.24.

This document is organized by Phase II permit section. All sections highlighted in grey highlighting are quotes directly from the permit itself. The following list is intended to provide a high-level summary of requirements and their associated location:

S1. PERMIT COVERAGE AREA AND PERMITTEES

Describes who is required to acquire coverage, area permit coverage and exceptions to coverage.

S2. AUTHORIZED DISCHARGES

Describes authorized the discharge of stormwater to surface waters and to ground waters of the state from MS4s owned or operated by each Permittee covered under this permit, in the geographic area covered by the permit.

S3. RESPONSIBILITIES OF PERMITTEES

Permittee responsibilities to maintain compliance and reliance on other entities.

S4. COMPLIANCE WITH STANDARDS

Describes standards that apply, maximum extent practical (MEP); and all known, available and reasonable methods of prevention, control and treatment (AKART). Includes requirements for credible site-specific information that a discharge from the MS4 owned or operated by the Permittee is causing or contributing to a known or likely violation of Water Quality Standards in the receiving water (S4. F. notification) and adaptive management.

S5. STORMWATER MANAGEMENT PROGRAM FOR CITIES, TOWNS, AND COUNTIES

Describes the City's Stormwater Management Program (SWMP).

- **S5. A.** Each Permittee shall develop and implement a *Stormwater Management Program* (SWMP). SWMP shall include Planned activities / actions, costs of the program, and coordination of permittee externally and internally.
- **S5. B**. The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the MEP, meet state AKART requirements, and protect water quality.

S5. C. The SWMP shall include the components:

- S5. C.1 Public Education and Outreach
- **S5. C.2** Public Involvement and Participation
- **S5.** C.3 Illicit Discharge Detection and Elimination
- S5. C.4 Controlling Runoff from New Development, Redevelopment and Construction Sites
 - a. Required ordinance and enforceable mechanisms.
 - b. **Permitting process** with site plan review, inspection and enforcement capability for private and public projects.
 - c. Verification of adequate **long-term operation and maintenance** of installed stormwater treatment and flow control bmps/facilities.
 - d. Making available as applicable copies of the "Notice of Intent for Construction Activity" and copies of the "Notice of Intent for Industrial Activity" to representatives of proposed new development and redevelopment.
 - e. Appropriate **training** for staff involved in the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement
 - f. Low impact development code-related requirements.
- S5. C.5 Municipal Operations and Maintenance
 - a. Standards.
 - b. **Inspections and maintenance actions** of all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities.
 - c. Spot checks.
 - d. Inspections of catch basins.
 - f. Implement practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee.
 - g. Training
 - h. Stormwater Pollution Prevention Plans (**SWPPPs**) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee
 - i. Records

S7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

Describes the City's specific requirements for Sinclair-Dyes Inlet WRIA 15.

S8. MONITORING AND ASSESSMENT

Describes the City's stormwater management program status and trends, effectiveness, and source identification and diagnostic monitoring requirements.

S9. REPORTING REQUIREMENTS

- A. Annual Report submittal requirements
- B. Record Keeping
- C. Record Availability
- D. Annual Report requirements

Section S1. PERMIT COVERAGE AREA AND PERMITTEE

Permit Applicability and Coverage Area

COBI has been covered by the Phase II Municipal Stormwater Permit (Phase II permit) since 2007 as a Phase II permittee. Coverage by the permit was obtained in March 2003 via the National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Permit Application. The permit coverage for COBI includes the entire island and coincides with COBI boundaries.

Section S2. AUTHORIZED DISCHARGES

Permit Requirements

A. This Permit authorizes the discharge of stormwater to surface waters and to ground waters of the state from MS4s owned or operated by each Permittee covered under this permit, in the geographic area covered pursuant to S1.A. These discharges are subject to the following limitations:

- 1. Discharges to ground waters of the state through facilities regulated under the Underground Injection Control (UIC) program, chapter 173-218 WAC, are not authorized under this Permit.
- 2. Discharges to ground waters not subject to regulation under the federal Clean Water Act are authorized in this permit only under state authorities, chapter 90.48 RCW, the Water Pollution Control Act.

B. This Permit authorizes discharges of non-stormwater flows to surface waters and to ground waters of the state from MS4s owned or operated by each Permittee covered under this permit, in the geographic area covered pursuant to S1. A, only under one or more of the following conditions:

- 1. The discharge is authorized by a separate NPDES or State Waste Discharge permit.
- 2. The discharge is from emergency firefighting activities.
- 3. The discharge is from another illicit or non-stormwater discharge that is managed by the Permittee as provided in Special Condition S5. C.3 or S6. C.3. These discharges are also subject to the limitations in S2. A.1 and S.2.A.2 above.

See permit for additional requirements.

See http://www.codepublishing.com/WA/BainbridgeIsland/

- Chapter 15.20 SURFACE AND STORM WATER MANAGEMENT
- Chapter 15.21 STORM WATER FACILITIES MAINTENANCE PROGRAM and
- Chapter 15.22 ILLICIT DISCHARGE DETECTION AND ELIMINATION.

Section S3. RESPONSIBILITIES OF PERMITTEES

Permit Requirements

A. Each Permittee covered under this Permit is responsible for compliance with the terms of this Permit for the regulated small MS4s that they own or operate.

See permit for additional requirements.

This SWMP and associated Standard Operating Procedure (SOPs) documents COBI compliance with the permit

requirements.	The SWMP will be posed at http://www.bainbridgewa.gov/176/Stormwater-Management-Program .

Section S4. COMPLIANCE WITH STANDARDS

Permit Requirements

C. The Permittee shall reduce the discharge of pollutants to the maximum extent practicable (MEP). . . .

F. A Permittee remains in compliance with S4 despite any discharges prohibited by S4. A or S4.B, when the Permittee undertakes the following response toward long term water quality improvement:

- 1. A Permittee shall notify Ecology in writing within 30 days of becoming aware, based on credible site-specific information that a **discharge from the MS4** owned or operated by the Permittee is causing or contributing to a known or likely violation of Water Quality Standards in the receiving water. Written notification provided under this subsection shall, at a minimum, identify the source of the site specific information, describe the nature and extent of the known or likely violation in the receiving water, and explain the reasons why the MS4 discharge is believed to be causing or contributing to the problem. For ongoing or continuing violations, a single written notification to Ecology will fulfill this requirement.
- 2. In the event that Ecology determines, based on a notification provided under S4.F.1 or through any other means, that a discharge from an MS4 owned or operated by the Permittee is causing or contributing to a violation of Water Quality Standards in a receiving water, Ecology will notify the Permittee in writing that an adaptive management response outlined in S4.F.3 below is required, unless:
 - a. Ecology also determines that the violation of Water Quality Standards is already being addressed by a Total Maximum Daily Load (TMDL) or other enforceable water quality cleanup plan; or
 - b. Ecology concludes the MS4 contribution to the violation will be eliminated through implementation of other permit requirements.

3. Adaptive Management Response

a. Within 60 days of receiving a notification under S4. F.2, or by an alternative date established by Ecology, the Permittee shall review its Stormwater Management Program (SWMP) and submit a report to Ecology. ...

See permit for additional requirements.

COBI meets these requirements via:

- Phase II permit compliance activities,
- this document (the Municipal Stormwater Permit Plan (SWMP) and Standard Operating Procedures (SOPs)),
- submittal of required Annual Reports and
- other documentation as required.

See http://www.bainbridgewa.gov/176/Stormwater-Management-Program for the online version of this document.

Section S5. STORMWATER MANAGEMENT PROGRAM FOR CITIES, TOWNS, AND COUNTIES

A. Each Permittee shall develop and implement a Stormwater Management Program (SWMP).

A SWMP is a set of actions and activities comprising the components listed in S5 and any additional actions necessary, to meet the requirements of applicable TMDLs pursuant to S7 *Compliance with TMDL Requirements*, and S8 *Monitoring and Assessment*. This section applies to all cities, towns, and counties covered under this Permit, including cities, towns, and counties that are Co-Permittees. ...

1. At a minimum the Permittee's SWMP shall be implemented throughout the geographic area subject to this Permit as described in S1. A.

See permit for additional requirements.

COBI has been covered by the Phase II Municipal Stormwater Permit (Phase II permit) since 2007 as a Phase II permittee. The permit coverage for COBI includes the entire island and coincides with COBI boundaries.

- 2. Each Permittee shall prepare written documentation of the SWMP, called the SWMP Plan. The SWMP Plan shall be organized according to the program components in S5.C ... and shall be updated at least annually for submittal with the Permittee's annual reports to Ecology The SWMP Plan shall be written to inform the public of the planned SWMP activities for the upcoming calendar year, and shall include a description of:
 - a. Planned activities for each of the program components included in S5. C.
 - b. Any additional **planned actions** to meet the requirements of applicable TMDLs pursuant to **S7** Compliance with Total Maximum Daily Load Requirements.
 - c. Any additional **planned actions** to meet the requirements of **S8** Monitoring.

COBI meets these requirements via Phase II permit compliance, this document (the Municipal Stormwater Permit Plan (SWMP) and Standard Operating Procedures (SOPs)), submittal of required Annual Reports and other documentation as required. See http://www.bainbridgewa.gov/176/Stormwater-Management-Program for online versions of these documents.

Each section of this manual (the SWMP) is organized by Phase II permit section and contains a section titled Planned Activities. The Planned Activities section meet S5. A. 2.a., b and c. requirements.

- 3. The SWMP shall include an ongoing program for gathering, tracking, maintaining, and using information to evaluate SWMP development, implementation and permit compliance and to set priorities.
 - a. Each Permittee shall track the cost or estimated cost of development and implementation of each component of the SWMP. This information shall be provided to Ecology upon request.

Most of the permit compliance activities are financed through the COBI Surface and Stormwater Management (SSWM) utility fees. Costs are tracked by project number associated with the appropriate permit section.

Potential future cost increases have not yet been estimated or budgeted. The cost of compliance is expected to rise as new and expanded Permit requirements take effect during the Permit term.

b. Each Permittee shall track the number of inspections, official enforcement actions and types of public education

activities as required by the respective program component. This information shall be included in the annual report.

See Annual Report for this information.

4. Permittees shall continue implementation of existing stormwater management programs until they begin implementation of the updated stormwater management program in accordance with the terms of this permit, including implementation schedules.

All programs were continued in 2017.

5. Coordination among Permittees

- a. Coordination among entities covered under municipal stormwater NPDES permits may be necessary to comply with certain conditions of the SWMP. The SWMP should include, when needed, coordination mechanisms among entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs and projects within adjoining or shared areas, including:
 - i. Coordination mechanisms clarifying roles and responsibilities for the control of pollutants between physically interconnected MS4s covered by a municipal stormwater permit.
 - ii. Coordinating stormwater management activities for shared water bodies among Permittees to avoid conflicting plans, policies and regulations.

See permit for additional requirements under this section.

Current Activities

- The City will continue their involvement with the education and outreach program services outlined in the current Interlocal Agreement with Kitsap County Public Works West Sound Stormwater Outreach Group (WSSOG). See Section S5. C. 1 Education and Outreach for additional information. City will continue its partnership with Kitsap County Public Works to promote and participate in the Mutt Mitt program. ILA with Kitsap County renewed until 2019.
- COBI has also participated in the following external groups as resources allow:
 - o Phase II coordinator's Group
 - O Stormwater Managers Committee of the Washington State Chapter of the American Public Works Association (APWA) a regional committee of stormwater professionals
 - o Stormwater Work Group (SWG)
 - o West Central Local Integrating Organization (LIO) Committee
- b. The SWMP shall include **coordination mechanisms among departments** within each jurisdiction to eliminate barriers to compliance with the terms of this permit. Permittees shall include a written description of internal coordination mechanisms in the Annual Report due no later than March 31, 2015.

See permit for additional requirements under this section.

Current Activities

- The COBI NPDES Permit Coordinator is the Lead for the COBI Phase II Stormwater Permit. The Coordinator will meet regularly and as needed to coordinate compliance activities. These meetings will facilitate coordination between the Public Works, Planning and Community Development, Operations and Maintenance and Finance departments, ensuring that each department understands the implications of the Permit requirements on their operations. Permit deliverables, such as the Annual Report and SWMP Plan, are prepared by the Coordinator with support from these departments.
- B. The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the MEP, meet state AKART requirements, and protect water quality.

See permit for additional requirements under this section.

Current Activities

COBI's SWMP is designed to reduce the discharge of pollutants from their MS4 to the MEP, meet state AKART requirements, and protect water quality by:

- Implementation of this SWMP and associated SOPs
- Adoption of the most recent version of the Ecology's Stormwater Management Manual for Western Washington which therefore meets the criteria and requirements that will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy State AKART requirements.

C. The **SWMP shall include the components** listed below. To the extent allowable under state or federal law, all components are mandatory for city, town or county Permittees covered under this permit.

1. Public Education and Outreach

The SWMP shall include an **education and outreach program** designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities.

See permit for additional requirements under this section

Current Activities

- The City continued their involvement with the education and outreach program services outlined in the current Interlocal Agreement with Kitsap County Public Works West Sound Stormwater Outreach Group (WSSOG). See Section S5. C. 1 Education and Outreach for additional information.
- The City's Water Quality and Flow Monitoring Program (**WQFMP**) continued to present water quality education and outreach in project reports and at public events and meetings. In this reporting period, City staff released the Murden Cove Watershed Nutrient and Bacteria Reduction Project final report, and installed an interpretative watershed display created by Sakai Intermediate School students as part of the project in City-owned beachfront public space in the watershed. City staff conducted three educational events (Kitsap Water Festival, Friends of the Farms Harvest Fair, and St. Cecilia School STEM class). By invitation, City Water Resources Specialist presented on the state of Puget Sound to Eagle Harbor Church members.
- The City's WQFMP continued to recruit, train, and utilize citizen volunteers in water quality monitoring
 and stewardship activities. In this reporting period, the City recruited and trained two new volunteers. The
 City's WQFMP relies on volunteers to conduct routine status and trends monitoring Island wide and
 baseline monitoring in Springbrook Creek and its tributaries for the Springbrook Creek Evaluation and
 Feasibility Project.
- Continued coordination and maintained the cooperative effort with the Kitsap Conservation District (**KCD**) that provides expertise to farmers, animal hobbyists, and other agricultural entities in BMPs for soil management, animal waste handling and storage, pasture management, and irrigation with the overarching goal of helping preserve water quality.
- City continued its partnership with Kitsap County Public Works to promote and participate in the Mutt Mitt program.
- Continued to utilize the city website and press releases as an educational component and an avenue to engage citizens in program elements, and to disseminate information on subjects such as IDDE activities, business visits, permit reissuance, TMDL status and various work group activities. Web site updated as needed.

- The City will continue involvement with the education and outreach program services outlined in the current Interlocal Agreement with Kitsap County Public Works West Sound Stormwater Outreach Group (WSSOG).
- The City's **WQFMP** will continue to visit Island classrooms to educate teachers and students about the status of the Island's stormwater, freshwater, and marine water quality, pollution sources, and best management practices. The WQFMP will continue to train student scientists in water quality monitoring techniques and data assessment and interpretation.
- The City's WQFMP will continue to present water quality education and information at public events and meetings.
- The City's WQFMP will continue to recruit, train, and utilize citizen volunteers in water quality monitoring and stewardship activities.
- The City's WQFMP will report water quality conditions to the general public, including shellfish harvest restrictions, recreational beach closures, drinking water advisories, regulatory and rule-making activity, and local water quality status and trends.
- Continue coordination and maintain the cooperative effort with the Kitsap Conservation District (**KCD**) that provides expertise to farmers, animal hobbyists, and other agricultural entities in BMPs for soil management, animal waste handling and storage, pasture management, and irrigation with the overarching goal of helping preserve water quality. ILA renewed until December 31, 2018.
- City will continue its partnership with Kitsap County Public Works to promote and participate in the Mutt Mitt program. ILA renewed until December 31, 2019.

2. Public Involvement and Participation

a. Permittees shall create opportunities for the **public to participate** in the decision-making processes involving the development, implementation and update of the Permittee's SWMP. ..

See permit for additional requirements under this section.

Current Activities

COBI provides for comments to the SWMP via the City's web site located at: http://www.bainbridgewa.gov/176/Stormwater-Management-Program with an associated comment form located at: http://www.bainbridgewa.gov/DocumentCenter/View/6559.

- COBI utilizes the city website and press releases as an educational component and an avenue to engage
 citizens in program elements, and to disseminate information on subjects such as IDDE activities, business
 visits, permit reissuance, TMDL status and various work group activities.
- COBI uses City mechanisms such as the Ad Hoc Tree and Low Impact Development committee, Planning Commission, Environmental Technical Advisory Committee and City Council public meetings to encourage and facilitate public involvement and participation.

- Continue to utilize the city website and press releases as an educational component and an avenue to engage citizens in program elements, and to disseminate information on subjects such as IDDE activities, business visits, permit reissuance, TMDL status and various work group activities.
- Continue use of City mechanisms such as the Ad Hoc Tree and Low Impact Development committee, Planning Commission, Environmental Technical Advisory Committee and City Council public meetings to encourage and facilitate public involvement and participation.

b. Each Permittee shall **post on their website their SWMP Plan** and the annual report required under S9. A no later than May 31 each year. All other submittals shall be available to the public upon request.

See permit for additional requirements under this section.

Current Activities

• COBI meets this requirement via the web site located at: http://www.bainbridgewa.gov/176/Stormwater-Management-Program

Planned Activities

• Continue to utilize the city website, the Water Resources listsery, and press releases as an educational component and an avenue to engage citizens in program elements, and to disseminate information on subjects such as IDDE activities, LID, permit reissuance, TMDL status and various work group activities.

3. Illicit Discharge Detection and Elimination – See COBI IDDE Manual

The SWMP shall include an ongoing program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into the MS4.

- a. Mapping of the MS4 shall continue on an ongoing basis.
- b. Each Permittee shall implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the Permittee's MS4 ...
- c. Each Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4 ...
 - i. All Permittees ... shall complete field screening for at least 40% of the MS4 no later than December 31, 2017,10 and on average 12% each year thereafter.
- d. Each Permittee shall implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the Permittee's MS4 ...
- e. Permittees shall train staff ...
- f. Recordkeeping ...

See permit for additional requirements under this section

Current Activities

- Continued implementation of:
 - o Chapter 15.20 SURFACE AND STORM WATER MANAGEMENT,
 - o Chapter 15.21 STORM WATER FACILITIES MAINTENANCE PROGRAM,
 - Chapter 15.22 ILLICIT DISCHARGE DETECTION AND ELIMINATION and
 - o other appropriate codes.
- Continued implementation of COBI IDDE Manual.
- The stormwater system has been mapped using GIS (Geographic Information System) technology. Updates and corrections are on-going. Additional outfalls, discharge points, conveyance systems, and facilities comprising COBI's MS4 are added to the map as they are identified.
- Reports of spills and illicit discharges are investigated. Appropriate actions are taken depending on the nature of the event.
- A telephone hotline for reporting spills and illicit discharges has been instituted, advertised, and is in operation [KITSAP ONE HOTLINE: 360-337-5777].

- Public employees, businesses, and the public have been informed of hazards associated with illegal discharges and improper disposal of waste in accordance with permit requirements.
- Employee training has been instituted for the identification and reporting of illicit discharges and connections. New, additional, or refresher training is provided when appropriate.
- Additional field screening has been implemented as required by the permit and is on-going in association with the operations and maintenance program for municipal flow control, treatment, and conveyance facilities.
- See Annual Report for responses/updates.

Planned Activities

- After completing field screening for at least 40% of the MS4 no later than December 31, 2017, COBI will complete an average 12% field screening for 2018 and beyond.
- Continue documentation and investigations of illicit discharges and pollutant sources.
- Update the IDDE tracking database as needed.
- Ongoing tracking and mapping of approved connections, outfalls, discharge points, conveyance systems, and facilities comprising the MS4.
- Respond to and/or provide support for emergency situations such as oil spills, chemical leaks, sewage spills, and flooding events.
- Provide necessary training and education for staff including review staff, planners, maintenance crews and inspectors to share knowledge or provide updates on previous training sessions.
- Assist and collaborate with the Kitsap Public Health District in conducting pollution identification and correction efforts for protection of Human Health beneficial uses to include swimming, boating, fishing, and shellfish harvest.
- Continue WQFMP's water quality and flow monitoring of stormwater, freshwater, and marine water quality to provide the following IDDE support:
 - O Assist in directing and informing on pollutant source identification efforts.
 - o Serve as a portion of the required field screening.

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4. Controlling Runoff from New Development, Redevelopment and Construction Sites

Each Permittee shall implement and enforce a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities. The program **shall apply to private and public** development, including roads.

S5. C. 4. **a. Implement an ordinance** or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects. [T]he ordinance or other enforceable mechanism to implement (i) through (iii), below, shall be adopted and effective no later than December 31, 2016.

The ordinance or other enforceable mechanism shall include, at a minimum: i. The Minimum Requirements, thresholds, and definitions in Appendix 1 ...

- ii. The local requirements shall include the following requirements, limitations, and criteria that, when used to implement the minimum requirements in Appendix 1 ...
 - (a) Site planning requirements
 - (b) BMP selection criteria
 - (c) BMP design criteria
 - (d) BMP infeasibility criteria
 - (e) LID competing needs criteria
 - (f) BMP limitations

Permittees shall document how the criteria and requirements will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy State AKART requirements.

Permittees who choose to use the requirements, limitations, and criteria above in the *Stormwater Management Manual for Western Washington* ... may cite this choice as their sole documentation to meet this requirement.

See permit for additional requirements under this section.

Current Activities

COBI currently meets this performance requirement through:

- Ongoing implementation of COBI code and associated program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities for private and public development. This includes:
 - o Titles 15, 16 and the Site Assessment Review Process. See http://www.bainbridgewa.gov/880/Development-Engineering
- Implementation of the most recent version of the Ecology's *Stormwater Management Manual for Western Washington* as part of it code and therefore meets the criteria and requirements that will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy State AKART requirements.

Planned Activities

- Ongoing implementation of COBI code and associated program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities for private and public development. This includes:
 - Titles 15, 16 and the Site Assessment Review Process. See http://www.bainbridgewa.gov/880/Development-Engineering
- Continued implementation of the most recent version of the Ecology's *Stormwater Management Manual for Western Washington* as part of it code and therefore meets the criteria and requirements that will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy State AKART requirements.

S5. C. 4. b. The program shall include a permitting process with site plan review, inspection and enforcement

capability to meet the standards listed in (i) through (iv) below, for both private and public projects, using qualified personnel ...

- i. Review of all stormwater site plans for proposed development activities.
- ii. Inspect, prior to clearing and construction, all permitted development sites that have a high potential for sediment transport ...
- iii. Inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce as necessary ...
- iv. Inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. Verify that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater treatment and flow control BMPs/facilities. Enforce as necessary ...
- v. Compliance with the inspection requirements in (ii), (iii) and (iv) above, shall be determined by the presence and records of an established inspection program designed to inspect all sites. Compliance during this permit term shall be determined by achieving at least 80% of scheduled inspections.
- vi. An enforcement strategy shall be implemented to respond to issues of non-compliance.

See permit for additional requirements under this section.

Current Activities

- Ongoing implementation of COBI code and associated program to reduce pollutants in stormwater runoff
 to a regulated small MS4 from new development, redevelopment and construction site activities for private
 and public development. This includes:
 - o Titles 15, 16 and the Site Assessment Review Process. See http://www.bainbridgewa.gov/880/Development-Engineering
- Continued implementation of the most recent version of the Ecology's *Stormwater Management Manual for Western Washington* as part of it code and therefore meets the criteria and requirements that will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy State AKART requirements.

- Ongoing implementation of COBI code and associated program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities for private and public development. This includes:
 - o Titles 15, 16 and the Site Assessment Review Process. See http://www.bainbridgewa.gov/880/Development-Engineering
- Continue implementation of latest Ecology Stormwater Management Manual for Western Washington as adopted.

S5. C. 4. c. The program shall include provisions to verify adequate **long-term operation and maintenance** (O&M) of stormwater treatment and flow control BMPs/facilities that are permitted and constructed pursuant to (b) above.

The provisions shall include:

i. Implementation of an ordinance or other enforceable mechanism that clearly identifies the party responsible for maintenance, requires inspection of facilities in accordance with the requirements in (ii) through (iv) below, and establishes enforcement procedures.

See permit for additional requirements under this section.

Current Activities

- Long-term operation and maintenance of permanent stormwater control facilities is provided for by ordinance whereby maintenance responsibility, standards, inspection requirements, and procedures are addressed. COBI Code that meet these requirements for *private facilities* is in Title 15 Building and Construction Chapter 15.20 SURFACE AND STORM WATER MANAGEMENT 15.20.060 Approval standards E. and can be found on the web here: http://www.codepublishing.com/WA/BainbridgeIsland/
- Legal authority for the inspection of privately-maintained facilities is provided for through the development review process. The City's permitting process includes plan review, inspection, and enforcement capabilities in accordance with the permit. Title 15 Building and Construction Chapter 15.20 SURFACE AND STORM WATER MANAGEMENT 15.20.060 Approval standards E. and can be found on the web here: http://www.codepublishing.com/WA/BainbridgeIsland/
- COBI SOPs that meet these requirements for public facilities can be found in the 2016 COBI O&M Manual.
- COBI SOPs that meet these requirements for private facilities can be found in <u>Appendix Private Facilities SOP</u>.
 Also see <u>Private Stormwater Maintenance Program</u> http://www.bainbridgewa.gov/779/Private-Stormwater-Maintenance-Program

Planned Activities

- Continue to ensure that all constructed private facilities record a Declaration of Covenant and provide an operations and maintenance plan to assure the facilities are operated and maintained appropriately in perpetuity.
- Continue to perform and track maintenance for public facilities via COBI O&M staff in accordance with the most recent Ecology *Stormwater Management Manual for Western Washington*.

ii. Each Permittee shall **establish maintenance standard**s that are as protective or more protective of facility function than those specified in Chapter 4 of Volume V of the *Stormwater Management Manual for Western Washington*. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard.

See permit for additional requirements under this section.

Current Activities

COBI uses the most current version of Chapter 4 of Volume V of the *Stormwater Management Manual for Western Washington* for maintenance standards for all public and private facilities.

Private Facilities

Maintenance standards for private facilities were updated to the most recent Ecology Manual in the <u>Appendix Private Facilities SOP</u> of this manual. Also see <u>Private Stormwater Maintenance Program</u> web page - http://www.bainbridgewa.gov/779/Private-Stormwater-Maintenance-Program

Public Facilities

Maintenance standards for public facilities were updated to the most recent Ecology Manual in the COBI O&M Manual.

Planned Activities

- Continue implementation of latest Ecology Stormwater Management Manual for Western Washington maintenance standards adopted.
- Continue implementation of Private Facility procedures described above.
- iii. Annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the MS4 ...
- iv. **Inspections** of all permanent stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments every six months until 90% of the lots are constructed ... to identify maintenance needs and enforce compliance with maintenance standards as needed.
- v. Compliance with the inspection requirements in (iii) and (iv) above shall be determined by the presence and records ... Compliance during this permit term shall be determined by achieving at least 80% of scheduled inspections.
- vi. Unless there are circumstances beyond the Permittee's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:
 - Within 1 year for typical maintenance of facilities, except catch basins.
 - Within 6 months for catch basins.
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.

Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.

vii. The program shall include a **procedure for keeping records of inspections and enforcement** actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained.

See permit for additional requirements under this section.

Current Activities

COBI maintains records of inspections described in iii. – vii. above for:

- 1. Private facilities by year.
- 2. Public facilities by year.

Planned Activities

- Continue implementation of latest Ecology *Stormwater Management Manual for Western Washington* **maintenance standards** adopted for both public and private developments.
- Document as described in Current Activities.

S5. C. 4. **d.** The program shall make available as applicable copies of the "**Notice of Intent for Construction Activity**" and copies of the "**Notice of Intent for Industrial Activity**" to representatives of proposed new development and redevelopment.

See permit for additional requirements under this section.

Current Activities

• 15.20.030 B. General provisions – requires that the Washington State Department of Ecology: general permit

- is required for development that disturbs one acre or more.
- Chapter 15.22 ILLICIT DISCHARGE DETECTION AND ELIMINATION forbids non-storm water discharges covered by another NPDES permit.
- Copies of the "Notice of Intent for Construction Activity" and copies of the "Notice of Intent for Industrial Activity" are provided to the applicants as part of the development permit process.

Planned Activities

- Continue implementation of the COBI code to reduce pollutants in stormwater runoff to the MS4 from new development, redevelopment and construction site activities for private and public development as described in Current Activities above.
- Continue to provide copies of the "Notice of Intent for Construction Activity" and copies of the "Notice of Intent for Industrial Activity" are provided to the applicants as part of the development permit process and business licensing.

S5. C. 4. e. ... staff whose primary job duties are implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities.

See permit for additional requirements under this section.

Current Activities

All appropriate staff members have training on erosion control, construction inspections, low impact
development techniques, and stormwater design standards and practices. Appropriate staff are also CESLcertified (Construction Site Erosion and Sediment Control Lead).

Planned Activities

- Continue implementation of the COBI program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities for private and public development.
- Update training as needed.

S5. C. 4. f. Low impact development code-related requirements.

See permit for additional requirements under this section.

Current Activities

• LID review and revision process report was completed by March 31, 2017.

- Continue implementation of latest Ecology Stormwater Management Manual for Western Washington adopted.
- Continue to implement COBI Low impact development code-related requirements as adopted.

5. Municipal Operations and Maintenance

Each Permittee shall implement an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

The minimum performance measures are:

- a. Each Permittee shall **implement maintenance standards** that are as protective, or more protective, of facility function than those specified in Chapter 4 of Volume V of the *Stormwater Management Manual for Western Washington*.
- b. **Annual inspection** of all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities, and taking appropriate maintenance actions in accordance with the adopted maintenance standards. ...
- c. **Spot checks** of potentially damaged permanent stormwater treatment and flow control BMPs/facilities after major storm events ...
- d. ... [I]nspection of all catch basins and inlets owned or operated by the Permittee at least once no later than August 1, 2017 and every two years thereafter ...
- e. Compliance with the inspection requirements in b, c, and d above shall be determined by the presence of an established inspection program designed to inspect all sites and achieving at least 95% of inspections. ...

See permit for additional requirements under this section.

Current Activities

• See COBI O&M Manual

- Continue implementation of COBI O&M Manual
- Utilize WQFMP monitoring data to identify short-term changes or long-term trends in water quality
 conditions to inform changes in the SWMP's Best Management Practices, determine the effectiveness of
 pollution prevention measures and water quality treatment BMPs, and gather information for use in
 developing pollution prevention measures or water quality treatment best management practices (BMPs).
- f. Implement practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee. Lands owned or maintained by the Permittee include, but are not limited to, streets, parking lots, roads, highways, buildings, parks, open space, road right of-ways, maintenance yards, and stormwater treatment and flow control BMPs/facilities. The following activities shall be addressed:
 - Pipe cleaning
 - Cleaning of culverts that convey stormwater in ditch systems
 - Ditch maintenance
 - Street cleaning
 - Road repair and resurfacing, including pavement grinding
 - Snow and ice control
 - Utility installation
 - Pavement striping maintenance
 - Maintaining roadside areas, including vegetation management
 - Dust control
 - Application of fertilizers, pesticides, and herbicides according to the instructions for their use, including reducing nutrients and pesticides using alternatives that minimize environmental impacts

- Sediment and erosion control
- Landscape maintenance and vegetation disposal
- Trash and pet waste management
- Building exterior cleaning and maintenance

See permit for additional requirements under this section.

Current Activities

See COBI O&M Manual

Planned Activities

- Continue implementation of COBI O&M Manual
- Utilize WQFMP monitoring data to identify short-term changes or long-term trends in water quality
 conditions to inform changes in the SWMP's Best Management Practices, determine the effectiveness of
 pollution prevention measures and water quality treatment BMPs, and gather information for use in
 developing pollution prevention measures or water quality treatment best management practices (BMPs).

g. Implement an ongoing **training** program for employees of the Permittee whose primary construction, operations or maintenance job functions may impact stormwater quality.

See permit for additional requirements under this section.

Current Activities

All appropriate staff members have training on erosion control, construction inspections, low impact
development techniques, and stormwater design standards and practices. Appropriate staff are also CESLcertified (Construction Site Erosion and Sediment Control Lead).

Planned Activities

• Continue on-going O&M training for employees of the Permittee whose primary construction, operations or maintenance job functions may impact stormwater quality.

h. Implement a **Stormwater Pollution Prevention Plan (SWPPP)** for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this Permit that are not required to have coverage under the *General NPDES Permit for Stormwater Discharges Associated with Industrial Activities* or another NPDES permit that authorizes stormwater discharges associated with the activity.

See permit for additional requirements under this section.

Current Activities

- A Stormwater Pollution Prevention Plan (SWPPP) is in place and operational for all heavy equipment maintenance or storage yards and material storage facilities owned or operated by the City.
- Records of inspections, maintenance, and repair activities are maintained.

- Update SWPPP as work load allows in 2018.
- Continue implementation of 2016 COBI O&M Manual.

Section S7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

Permit Requirements

The following requirements apply if an applicable TMDL is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs are TMDLs which have been approved by EPA on or before the issuance date of this Permit or prior to the date that Ecology issues coverage under this permit, whichever is later.

A. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements identified in Appendix 2. Each Permittee shall keep records of all actions required by this Permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation shall be included as part of the annual report submitted to Ecology. Each annual report shall include a summary of relevant SWMP and Appendix 2 activities conducted in the TMDL area to address the applicable TMDL parameter(s).

B. For applicable TMDLs not listed in Appendix 2, compliance with this Permit shall constitute compliance with those TMDLs.

Appendix 2 - Page 23

Actions Required

City of Bainbridge Island

- If a minimum of 10 monthly ambient water quality samples collected under a previous monitoring program approved by Ecology in nearshore areas below Lynwood Center between 2011 and 2013 indicate that this area does NOT meet water quality standards, then by December 1, 2014, the City shall designate those areas discharging via MS4 either directly or to creeks that discharge to shoreline areas along Rich Passage as the highest priority areas for illicit discharge detection and elimination field screening. The City shall implement the schedules and activities identified in S5. C.3 of the Western Washington Phase II permit for response to any illicit discharges found.
- By December 31, 2016, review and, if necessary, increase the frequency of inspection and cleanout of catch basins (under S5. C.4 and 5 of the Western Washington Phase II permit) to maintain catch basin sediment levels below 60 percent full. Focus on MS4 areas that drain to nearshore areas along Rich Passage below Lynwood Center and the northern shoreline of Fletcher Bay near DOH site 457.
- Use appropriate investigative tools to ensure that contaminated stormwater is not contributing to the fecal coliform bacteria exceedances at DOH site 457, offshore Fletcher Bay.
- Install and maintain pet waste education and collection stations at Permittee owned and operated lands adjacent to stream and marine shorelines. Focus on locations where people commonly walk their dogs.

See permit for additional requirements under this section.

Current Activities

- Installed and maintained pet waste education and collection stations at city owned and operated lands adjacent to stream and marine shorelines discharging to the TMDL area with a focus on locations where people commonly walk their dogs.
- Designated the areas discharging via MS4 either directly or to creeks that discharge to shoreline areas along Rich Passage as high priority for illicit discharge detection and elimination field screening
- Reviewed and, if necessary, increased the frequency of inspection and cleanout of catch basins to maintain catch basin sediment levels below 60 percent full in areas that drain to nearshore areas along Rich Passage below Lynwood Center and the northern shoreline of Fletcher Bay.

- Continue to maintain pet waste education and collection stations at city owned and operated lands adjacent to stream and marine shorelines discharging to the TMDL area with a focus on locations where people commonly walk their dogs.
- Designate the areas discharging via MS4 either directly or to creeks that discharge to shoreline areas along Rich Passage as high priority for illicit discharge detection and elimination field screening
- Continue to review and, if necessary, increase the frequency of inspection and cleanout of catch basins to maintain catch basin sediment levels below 60 percent full in areas that drain to nearshore areas along Rich Passage below Lynwood Center and the northern shoreline of Fletcher Bay.

Section S8. MONITORING AND ASSESSMENT

Permit Requirements

A. All Permittees including Secondary Permittees shall provide, in each annual report, a description of any stormwater monitoring or stormwater-related studies conducted by the Permittee during the reporting period. If other stormwater monitoring or stormwater-related studies were conducted on behalf of the Permittee during the reporting period, or if stormwater-related investigations conducted by other entities were reported to the Permittee during the reporting period, a brief description of the type of information gathered or received shall be included in the annual report.

Permittees are not required to provide descriptions of any monitoring, studies, or analyses conducted as part of the Regional Stormwater Monitoring Program (RSMP) in annual reports. If a Permittee conducts independent monitoring in accordance with requirements in S8. B or S8.C below, annual reporting of such monitoring must follow the requirements specified in those sections.

Current and Planned Activities

Water Quality and Flow Monitoring Program

The City's Water Quality and Flow Monitoring Program conducted one stormwater monitoring activity in this reporting period – long-term status and trends monitoring of stormwater effluent. As part of this effort, the City collected monthly grab samples from a stormwater outfall which drains a significant portion of the City's urbanized core. Grab samples were analyzed for fecal coliform bacteria on a monthly basis, and nitrogen, phosphorus, and heavy metals were analyzed on a semi-annual basis. Physiochemical measurements were also collected during the monthly grab sample events. The City plans to continue this activity in 2018.

<u>Springbrook Creek Evaluation and Feasibility Project - http://www.bi-landtrust.org/default.asp?ID=77</u>

In support of this project, the City conducted baseline water quality and flow monitoring throughout the basin to include targeted storm event monitoring to assess stormwater runoff impacts. In 2017, City staff and volunteers, completed baseline monitoring, and City staff conducted preliminary data assessment. Watershed characterization of this basin and identification of priority actions/projects will be completed into 2018.

<u>Integrative Diagnostic Stormwater Monitoring with Passive Sampling Devices - http://www.nesdi.navy.mil/ProjectFactSheet.aspx?ProjID=523</u>

This project uses two passive sampling devices - Polar Organic Chemical Integrative Samplers (POCIS) to measure selected organic marker chemicals found in human waste and wastewater including pharmaceuticals, hand sanitizers, fragrances, and others and Diffusive Gradient in Thin-film (DGT) to characterize the pulsed nature of metal exposure during storm events, and spatially to verify mixing of stormwater with the receiving environment. Performance will be evaluated based on the cost and ability for the PSDs to provide meaningful data with which to quantify the effectiveness of BMPs and stormwater management programs.

In support of this project, the City contributed two monitoring sites to the study - Eagle Harbor which receives stormwater runoff from the City's urban core and Murden Creek with observed impacts of which stormwater runoff is a likely contributor. Both of these water bodies are currently 303(d) listed for one or more pollutants. In 2017, U.S. Navy deployed passive sampling devices on two occasions - one wet season deployment and one dry season deployment. Additional deployments are planned for 2018.

B. Status and trends monitoring. By December 1, 2013, each city and county Permittee listed in S1. D.2.a(i) and S1. D.2.a(ii) located in Clallam, Island, King, Kitsap, Pierce, Skagit, Snohomish, Thurston, or Whatcom County shall notify Ecology in writing which of the following two options for status and trends monitoring the Permittee chooses to carry out during this permit cycle. Either option will fully satisfy the Permittee's obligations under this

section (S8. B). Each Permittee shall select a single option for the duration of this permit term.

See permit for additional requirements under this section.

Current Activities

COBI notified Ecology of its intent to pay into 1. Status and Trends Monitoring Option #1

Planned Activities

1. Status and Trends Monitoring Option #1:

The course of the control of the con		
Permittee	Annual payment	
	amount	
Bainbridge Island	\$ 5,709	

C. Stormwater management program effectiveness studies. By December 1, 2013, each city and county Permittee listed in S1. D.2.a(i) and S1. D.2.a(ii) shall notify Ecology in writing which of the following two options for effectiveness studies the Permittee chooses to carry out during this permit cycle. Either option will fully satisfy the Permittee's obligations under this section (S8.C). Each Permittee shall select a single option for the duration of this permit term.

See permit for additional requirements under this section.

Current Activities

COBI notified Ecology of its intent to pay into 1. Effectiveness Studies Option #1

Planned Activities

1. Effectiveness Studies Option #1:

Permittee	Annual payment
	amount
Bainbridge Island	\$ 9,512

D. Source identification and diagnostic monitoring. Each city and county Permittee listed in S1. D.2.a(i) and S1. D.2.a(ii) shall pay into a collective fund to implement the RSMP Source Identification Information Repository (SIDIR). The payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amounts are (Permittees are listed alphabetically, by county):

See permit for additional requirements under this section.

Current Activity

COBI notified Ecology of its intent to pay into a collective fund to implement the RSMP Source Identification Information Repository (SIDIR).

Permittee	Annual payment
	amount
Bainbridge Island	\$882

Section S9. REPORTING REQUIREMENTS

Permit Requirements

- A. No later than March 31 of each year beginning in 2015, each Permittee shall submit an annual report. ...
- B. Each Permittee is required to keep all records related to this permit and the SWMP for at least five years.
- C. Each Permittee shall make all records related to this permit and the Permittee's SWMP available to the public at reasonable times during business hours. The Permittee will provide a copy of the most recent annual report to any individual or entity, upon request.
- D. The annual report for cities, towns, and counties Each annual report shall include the following:
 - 1. A copy of the Permittee's current SWMP Plan as required by S5. A.2.
 - 2. Submittal of the **annual report form as provided by Ecology** pursuant to S9. A, describing the status of implementation of the requirements of this permit during the reporting period.
 - 3. **Attachments** to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this permit during the reporting period. Refer to Appendix 3 for annual report questions.
 - 4. If applicable, notice that the MS4 is **relying on another governmental entity** to satisfy any of the obligations under this permit.
 - 5. **Certification and signature** pursuant to G19.D, and notification of any changes to authorization pursuant to G19. C.

See permit for additional requirements under this section.

SECTION IV REFERENCES

Stormwater Management Manual for Western Washington - Washington State Department of Ecology, Water Quality Program, Publication No. 12-10-030, August 2012, as amended December 2014.

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SECTION V - DOCUMENT CHANGE LOG

Table 5-1 provides a record of changes made to this Manual.

Table 5-1 DOCUMENT CHANGE LOG		
Date of Change		Changed by / Company and Name
01/2017	Updated COBI Stormwater Management Program Plan with the help of Water Resources Team, - Public Works, Planning and Community Development, Operations and Maintenance and Finance.	
Updated COBI Stormwater Management Program Plan with the help of Water Resources Team, - Public Works, Planning and Community Development, Operations and Maintenance and Finance.		Guthrie / COBI

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Appendices

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Appendix - COBI IDDE Manual

See

G:\Water Resources Program\SSWM-NPDES\S5 C3. Illicit Discharge Detection and Elimination\C3. c. Program to identify - Manual\C3. Manual

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Appendix - Private Facilities SOP

Also see Private Stormwater Maintenance Program - http://www.bainbridgewa.gov/779/Private-Stormwater-Maintenance-Program

See <u>Private Stormwater Maintenance Program</u> - <u>http://www.bainbridgewa.gov/779/Private-Stormwater-Maintenance-Program</u>

Maintenance Program

The City of Bainbridge Island (COBI) works with local property owners to ensure that all private stormwater systems receive routine inspection (at least once per year) and maintenance. This helps these systems to function as they were designed and to prevent flooding, erosion and water quality degradation.

Understanding Your Stormwater System

Typical stormwater systems consist of some combination of roof drains, underground pipes, catch basins, swales, culverts, ditches, oil/water separators, and manmade retention, detention, infiltration vaults and ponds. Retention and detention facilities prevent flooding and reduce contamination by temporarily storing stormwater in ponds or underground vaults with control structures. These facilities slow the rate of runoff and also allow suspended contaminants to settle out or be removed before the water enters our creeks and lakes. Low-impact development (LID) facilities strives to mimic pre-developed infiltration, filtration, storage, evaporation, and transpiration of water into the groundwater below.

Stormwater System Inspection Process

Private stormwater systems must be inspected on a regular basis, at least per year:

- 1. Annually, the COBI will notify property owners by letter when it is time for their next stormwater system inspection.
- 2. Upon notification, the property owner will be responsible for completing the inspection and any necessary maintenance. Property owners must submit the <u>Certificate of Inspection</u> once the inspection has been completed.
- 3. If maintenance is required, the property owner will need to fill out and submit a <u>Certificate of Completion</u> when the work is finished
- 4. COBI will perform verification inspections on a certain percentage of private facilities to ensure proper inspection and maintenance.

Maintaining Your Stormwater System

Prevent materials that are stored outside from leaking, draining, spilling or being dumped into the stormwater system. Keeping contaminants out of your stormwater system may reduce the disposal costs for materials cleaned from your system.

Click here for COBI's maintenance requirements for typical stormwater facilities and/or Ecology Stormwater Manual Vol V Runoff Treatment BMPs – Maintenance Standards for Drainage Facilities. Typical stormwater system maintenance requirements might include: cleaning contaminated sediment and liquids from detention ponds, underground pipes, catch basins, and manholes or repairing control structures.

Cost of Maintenance

Maintenance costs depend on both the type and the condition of the existing system. The cost for maintenance each time it is required can vary greatly due to depth, location and number of structures.

Drainage Maintenance Service

If your stormwater system requires maintenance, we will provide you with a list of local firms that provide drainage maintenance services. You can also download a list of firms: <u>Firms Providing Drainage Maintenance Service</u>.

Certificate of Completion

The <u>Certificate of Completion</u> should be filled out by you or your contractor. Please include all maintenance that has been performed on your system since the date it was inspected by the City. If you hired a contractor to perform the maintenance, have them sign the form as well.

Submit the completed form to:

Marilyn Guthrie NPDES Permit Coordinator - Public Works 280 Madison Ave. N Bainbridge Island WA 98110

See the following attachments for additional information.

COBI Web Site - http://www.bainbridgewa.gov/779/Private-Stormwater-Maintenance-Program

Direct Link to Certificate of Inspection

Direct Link to Certificate of Completion - Maintenance

Ecology Stormwater Manual Vol V Runoff Treatment BMPs – Maintenance Standards for Drainage Facilities

Firms Providing Drainage Maintenance Service (PDF)

COBI Code requiring private facility inspection

Managing Rainwater Around Your Home (PDF)

Appendix - Title 15 Building and Construction Chapter 15.20 SURFACE AND STORM WATER MANAGEMENT

See COBI Code Online - http://	//www.codepublishing.com	m/WA/BainbridgeIsland	/ for most current version.

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Appendix – 2007 Permit Requirement S5. C.4.g. Policies and Procedures

Compliance with 2007 Permit Requirement S5.C.4.g.

Establishment and implementation of policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the Permittee

Introduction

Phase II Permit - January 17, 2007 - Requirement **S5.C.4.g** Page 23 of 51

5. Pollution Prevention and Operation and Maintenance for Municipal Operations Within three years of the effective date of this Permit, each Permittee shall develop and implement an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

g. Establishment and implementation of policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the Permittee and subject to this Permit, including but not limited to: parks, open space, road right of-way, maintenance yards, and stormwater treatment and flow control facilities. These policies and procedures shall address, but are not limited to:

- Application of fertilizer, pesticides, and herbicides including the
- Development of nutrient management and integrated pest management plans.
- Sediment and erosion control.
- Landscape maintenance and vegetation disposal.
- Trash management.
- Building exterior cleaning and maintenance.

Integrated Pest Management

Pollutant Control Approach: Control of fertilizer and pesticide applications, soil erosion, and site debris to prevent contamination of stormwater. Use pesticides only as a last resort. If pesticides/herbicides are used they must be carefully applied in accordance with label instructions on U.S. Environmental Protection Agency (EPA) registered materials. Maintain appropriate vegetation, with proper fertilizer application where practicable, to control erosion and the discharge of stormwater pollutants. Where practicable grow plant species appropriate for the site, or adjust the soil properties of the subject site to grow desired plant species.

Integrated Pest Management Steps

An IPM program might consist of the following steps:

- Step 1: Correctly identify problem pests and understand their life cycle
- **Step 2:** Establish tolerance thresholds for pests.
- **Step 3:** Monitor to detect and prevent pest problems.
- **Step 4:** Modify the maintenance program to promote healthy plants and discourage pests.
- Step 5: Use cultural, physical, mechanical, or biological controls first if pests exceed the tolerance thresholds.
- **Step 6:** Evaluate and record the effectiveness of the control and modify maintenance practices to support lawn or landscape recovery and prevent recurrence.

For an elaboration of these steps refer to DOE Stormwater Management Manual for Western Washington, Volume IV, Appendix IV-F.

STANDARDS AND GUIDELINES

"Pesticide Tier Tables" developed by the Washington Toxics Coalition to prioritize the phase-out of chemicals, based on the level of threat they pose to human health and the environment can be used. Tier Tables with phase-out priority assignments (updated September 2005):

- Herbicides
- Insecticides
- Fungicides
- Other

Title 16 ENVIRONMENT

Chapter 16.12 SHORELINE MASTER PROGRAM

- 5. Water Quality and Stormwater Management.
 - a. Applicability. These provisions apply to all shoreline development, including that which does not require a shoreline substantial development permit. The use of pesticides, herbicides or fertilizers within the shorelines jurisdiction, including applications of herbicides to control noxious aquatic vegetation, shall comply with regulations of BIMC 16.12.060, Critical areas, and responsible federal and state agencies. Shoreline development and activities will be reviewed under the no net loss provisions of subsection B.2 of this section, Environmental Impacts, and may also be reviewed under subsection A of this section, Regulations General; subsection B.3 of this section, Vegetation Management; BIMC 16.12.060, Critical areas; and Chapter 15.18 BIMC, Land Clearing, when applicable. Other portions of this program may also apply.
 - b. Prohibited.
 - i. Wood that is treated with creosote, copper chromium arsenic (CCA) or pentachlorophenol (PCP) in or above shoreline water bodies, unless otherwise approved in BIMC <u>16.12.050</u>.C, Overwater Structures. ii. Use of pesticides within a shoreline buffer and site-specific vegetation management areas, except as follows:
 - (A) All shoreline developments and activities shall comply with the following standards in the application of pesticides or herbicides:
 - (1) As part of an **integrated pest management** plan which is administered by a qualified professional to control rodents.
 - (2) When it is the accepted practice to successfully eradicate aquatic or upland invasive/noxious vegetation species and Department of Ecology has approved a method of application.

<u>Title 16 ENVIRONMENT</u> <u>Chapter 16.20 CRITICAL AREAS</u>

Table 7: Examples of Measures to Minimize Impacts to Wetlands from Different Types of Activities

Examples of Disturbance	Examples of Measures to Minimize Impacts	Activities that Cause the Disturbance
Lights	Direct lights away from wetland.	Parking lots, warehouses, manufacturing, residential
Noise	Locate activity that generates noise away from wetland.	Manufacturing, residential
Toxic runoff*	Route all new runoff away from wetland. Establish covenants limiting use of pesticides within 150 ft. of wetland. Apply integrated pest management.	Parking lots, roads, manufacturing, residential areas, application of agricultural pesticides, landscaping
Change in water regime	Infiltrate or treat, detain, and disperse new runoff into buffer.	Impermeable surfaces, lawns, tilling
Pets	Plant dense vegetation around buffer, such as rose, hawthorn, etc.	Residential areas
Human disturbance	Plant buffer with impenetrable natural vegetation appropriate for region.	Residential areas
Dust	Utilize best management practices to control dust.	Tilled fields

^{*}These examples are not necessarily adequate to meet the rules for minimizing toxic runoff if threatened or endangered species are present at the site.

Attachment City Code and ILA 2017 City Code - Chapter 16.30 PEST MANAGEMENT AND PESTICIDE USE

16.30.010 Purpose

- A. The city promotes environmentally sensitive building and landscape pest and vegetation management that preserves the city's building and landscape assets and protects the health and safety of the public and city employees. The city policy is to eliminate the use of pesticides on its property.
- B. The city shall use the prevention of pest problems as its primary tool for landscaping, building maintenance and other pest management issues on city property. When pest problems occur, mechanical or biological methods shall be the preferred control methods. Least toxic pesticides shall be used only as a last resort when other options have been proven ineffective.
- C. Since inception of the city to its current status as an island-wide entity, the city staff has reduced the amount and toxicity of the pesticides used in building maintenance and landscape management to a very minimal amount. It is the city's practice to continue to look for ways to reduce the toxicity and amount of hazardous materials used in all city operations, including pesticide usage in building management and landscape maintenance.

Interlocal Agreement between the City and Kitsap County Noxious Weed Control Board

The Bainbridge City Council budgeted funds in 201 7 for noxious weed control and has extended the program through December 31, 2021. The Board has the expertise to manage a noxious weed control program on Bainbridge Island. The Board is implementing efforts previously conducted by the Kitsap Conservation District which successfully implemented the City's knotweed eradication program by way of a previous interlocal agreement.

The Board shall perform such duties and work as are listed on the Scope of Work, Exhibit A.

EXHIBIT A - SCOPE OF WORK

Under the terms of this Agreement, the Board and/or Board staff agree(s) to do the following work:

- A. Recruit and train weed inspectors and support staff for the purpose of carrying out the mandates of chapter 17.10 RCW;
- B. Coordinate and implement Integrated Pest Management strategies on all lands under the jurisdiction of the City for the control of Designated Class A and B noxious weeds as defined in chapter 16.750 WAC;
- C. Provide information and recommendations to assist landowners in their efforts to comply with chapter 17.10 RCW;
- D. Keep a weekly log of noxious weed inspections and landowner contacts, which logs shall be provided to the City with the year-end report and shall include:
 - 1) Detailed logs of GPS locations of noxious weeds; and
 - 2) GPS information regarding such weed inspections and landowner contacts.
- E. Be responsible for the Control of all Class A and B designated noxious weeds (as listed in chapter 16.750 WAC) within the City limits;
- F. Keep detailed logs of control procedures.
- G. Provide staff to assist with landowner complaints.
- H. Pay for all weed inspector wages.
- I. Produce a year-end report summarizing the work performed and evaluating the performance and results of the work performed pertaining to this Agreement by January 15 for the previous year, as specified in Section 5.