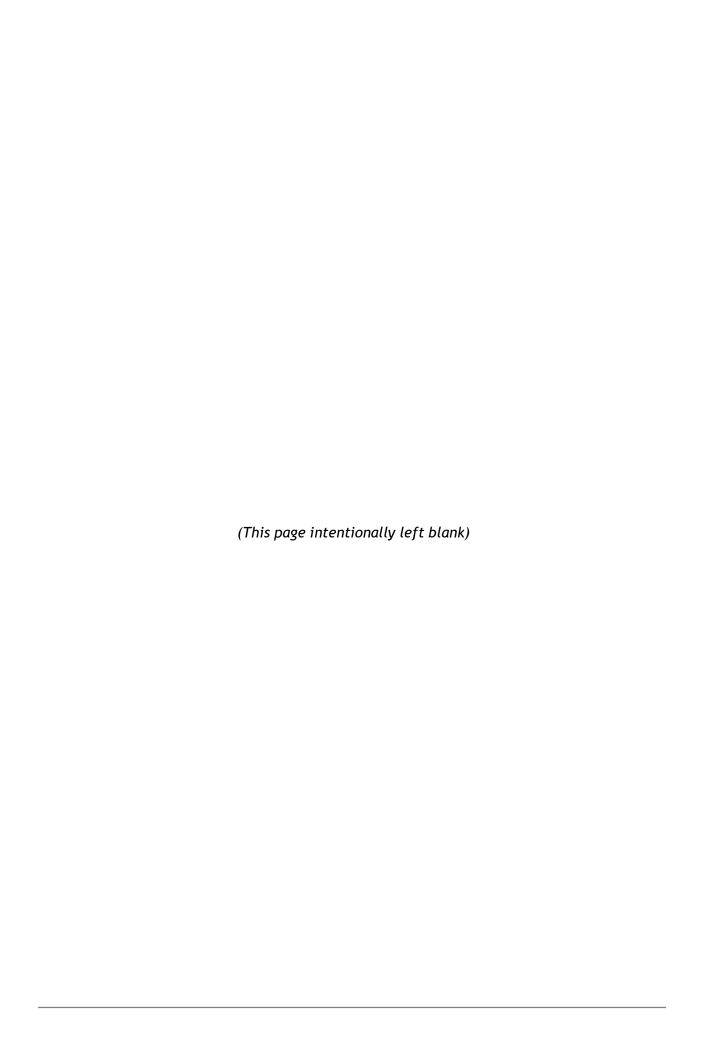




City of Sammamish NPDES PHASE II Stormwater Management Program Plan March 2019





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INTRODUCTION AND BACKGROUND

This report represents the stormwater management program (SWMP) document prepared by the City of Sammamish (City) in accordance with the National Pollutant Discharge Elimination System (NPDES) Phase II Western Washington Municipal Stormwater Permit (Phase II permit).

The Phase II permit is a requirement of the Federal Clean Water Act (CWA), which requires the City to develop a stormwater management program that includes numerous actions and activities with the overall goal of reducing the discharge of pollutants from its municipal separate (MS4) storm sewer system, to the maximum extent practicable, and of protecting water quality. The actions and activities are described in a number of program components under Section S5 of the Phase II permit. The Phase II permit directs the City to prepare a SWMP document that includes a description for each of the program components.

The following provides a brief background to, and overview of, the Phase II permit processes that have occurred to date:

- The federal Clean Water Act (CWA) was modified in 1987 to include stormwater in the NPDES permit program. That is, a municipality such as the City, will need an NPDES permit to discharge stormwater from its municipal separate storm sewer system, or MS4, to waters of the state.
- In the state of Washington, the United States Environmental Protection Agency (EPA) has given the Washington State Department of Ecology (Ecology) the authority to issue such permits.
- In 1999, EPA issued final Phase II rules to include all municipalities in census-defined urban areas with the current population greater than 1,000.
- The City is determined to be an operator of a regulated small MS4, in an Ecologydesignated urbanized area, and is therefore required to submit for approval and receive coverage under an Ecology Phase II permit.

The SWMP must include the following components:

- 1. A comprehensive stormwater planning program to inform and assist in the development of policies and strategies to protect aquatic resources.
- 2. A public education and outreach program designed to build general awareness about methods to address stormwater impacts, effect behavior change to reduce behaviors that lead to adverse stormwater impacts and create stewardship opportunities that encourage the community to address stormwater impacts.
- 3. A public involvement and participation program to provide public participation opportunities to involve the public in the development, implementation, and update of the SWMP.
- 4. An ongoing mapping and documentation program to map and document the MS4.
- 5. An ongoing illicit discharge detection and elimination (IDDE) program to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the MS4.
- 6. A program to reduce pollutants in stormwater runoff to the MS4 from new development, redevelopment, and construction site activities.
- 7. An operation and maintenance (O&M) program to prevent or reduce pollutant runoff from municipal operations.
- 8. A program to prevent and reduce pollutant runoff from areas that discharge to the MS4.

In addition, the Phase II Permit requires that the city prepare written documentation of the SWMP and update that documentation annually. This SWMP plan satisfies this requirement.

The City is required to report annually on progress in permit implementation for the prior year and submit a Stormwater Management Program (SWMP) report that describes the program activities for the coming year.

The implementation of various Permit conditions is phased throughout the five-year Permit term, August 1, 2013 through July 31, 2018. 2019 is a transition year between the 2013 -2018 Permit and the pending 2019 – 2024 Permit. As such, this document will reflect the City's plans for ongoing compliance with the existing 2013-2018 permit. The City cannot wholly provide plans for complying with the 2019 -2024 Permit, as it has not been issued by Ecology. However, once the new Permit is issued in 2019, the City will begin the process of planning and making modifications to its existing SWMP with the intent of fully complying with the new permit requirements.

STORMWATER PLANNING

The City plans to continue to implement the stormwater planning requirements that came into effect on August 1, 2019. This section describes the Phase II Permit requirements related to comprehensive stormwater planning, including planned activities.

Phase II Permit Requirements

Section S5.C.1 of the 2019–2024 Phase II Permit requires the city to implement stormwater planning program to develop water quality management policies and strategies protective of aquatic resources and to convene an interdisciplinary team to inform in the development, progress, and influence of the program. The specific Phase II Permit requirements are as follows:

- Report on how stormwater management needs and receiving water protection/improvement inform the long-range planning update process and influence policies and implementation strategies.
 - By January 1, 2023, describe how the Comprehensive Plan and other long-range land use plans addressed water quality and watershed protection.
- Annually assess and report newly identified administrative or regulatory barriers to implementation of low impact development (LID) principles or low impact development best management practices (LID BMPs). Report on measures to address barriers since local codes were adopted in 2016, and mechanisms to encourage or require LID implementation.
- 3. Implement stormwater management action planning:
 - a. Review existing information to assess local receiving water bodies and contributing basin conditions. By **March 31, 2022**, submit a watershed inventory to include a brief description of relative condition of receiving watershed.
 - b. By **June 30, 2022**, develop a prioritization method and process to identify and rank receiving water bodies for stormwater facility retrofits and management actions.
 - Document a process and schedule to assess and improve the planning and implementation of procedures or projects.
 - c. By **March 31, 2023**, develop a Stormwater Management Action Plan (SMAP) for at least one high priority area.

Planned and Recommended Activities

- 1. The City will Report on how stormwater management needs and receiving water protection/improvement inform the long-range planning update process and influence policies and implementation strategies.
 - By January 1, 2023, describe how the Comprehensive Plan and other long-range land use plans addressed water quality and watershed protection.
- The City will annually assess, and report newly identified administrative or regulatory barriers to implementation of low impact development (LID) principles or low impact development best management practices (LID BMPs). Report on measures to address barriers since local codes were adopted in 2016, and mechanisms to encourage or require LID implementation.
- 3. The City will implement stormwater management action planning:
 - a. Review existing information to assess local receiving water bodies and contributing basin conditions.
 - b. By **June 30, 2022**, develop a prioritization method and process to identify and rank receiving water bodies for stormwater facility retrofits and management actions.
 - Document a process and schedule to assess and improve the planning and implementation of procedures or projects.
 - c. By **March 31, 2023**, develop a Stormwater Management Action Plan (SMAP) for at least one high priority area.

PUBLIC EDUCATION AND OUTREACH

The City's public education and outreach program currently includes a wide range of educational brochures for a variety of audiences. This section describes the Phase II Permit requirements related to Public Education and Outreach, including the city's planned compliance activities.

Phase II Permit Requirements

Section S5.C.2 of the 2019–2024 Phase II Permit requires the city to implement a public education and outreach program based on water quality information and target audience characteristics. Education and outreach efforts shall be prioritized in the following areas:

- 1. Build general awareness that annually selects at least one target audience and one subject area from a or b:
 - a. General public (including overburdened communities, school age children), or businesses (including home-based or mobile businesses)

Subject areas:

- General impacts of stormwater on surface waters, including impacts from impervious surfaces
- Low impact development (LID) principles and LID BMPs
- b. Engineers, contractors, developers, or land-use planner's Subject areas:
 - Technical standards for stormwater site and erosion control plans
 - LID principles
 - Permanent stormwater facilities and LID BMPs
- c. F Permittees shall provide subject area information to the target audience on an ongoing or strategic schedule.
- 2. Effect behavior change that selects at least one target audience and one BMP from the following:
 - a. Residents, landscapers, property managers/owners, developers, school age children, or businesses (including home-based or mobile businesses)

BMPs:

- Use and storage of: pesticides, fertilizers, and/or other household chemicals
- Use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps, and/or other hazardous materials
- Prevention of illicit discharges
- March 2019 Yard care techniques protective of water quality

- Carpet cleaning
- Repair and maintenance
- BMPs for: vehicles, equipment, and/or home buildings
- Pet waste management and disposal
- LID principles and LID BMPs
- Stormwater facility maintenance, including LID facilities
- Dumpster and trash compactor maintenance
- Litter and debris prevention
- Sediment and erosion control
- (Audience specific) Source control BMPs
- F(Audience specific) Locally-important, municipal stormwater-related subject area
- b. By **July 1, 2020**, conduct an evaluation of the effectiveness of an ongoing behavior change program with lesson learned and recommendations for changing the program.
- c. Based on the evaluation, by **February 1, 2021**, use social marking methods to develop a program tailored to the community, including an evaluation plan, strategy and schedule.
- d. By **April 1, 2021**, begin to implement the developed strategy.
- e. By **March 31, 2024**, evaluate and report on changes in understanding and adopted behaviors resulting from the implemented strategy and on planned or recommended changes to the program to improve efficiency.
- f. Use the evaluation results to continue to direct effective methods and implementation of the ongoing behavior change program.
- 3. Create and advertise stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities or events such as storm drain marking, volunteer monitoring, riparian plantings and education activities.

Planned and Recommended Activities

The City currently has an active public education and outreach program that uses a variety of approaches to inform the community about stormwater-related pollution prevention activities.

The City, in conjunction with King Conservation District, has for a fifth year implemented a learning program to educate school aged children in Sammamish. This program, *Healthy Watershed, Healthy World* will be again modified, adjusted and implemented in the 2020-21 school year.

The learning objectives include the importance of clean water, water pollution and where it comes from, and methods of reducing pollution from human activities. Participants in the program will sign a pledge stating how they will prevent water pollution in their daily lives. The pledge tracks the behavior change of children.



The City plans to contract with ECOSS to increase awareness and understanding of stormwater management among business owners, managers and employees and encourage businesses to practice pollution prevention and best management practices. This program reaches approximately 20 businesses annually and will run from June 2020 to June of 2021.

Again in 2020 the City has five interpretive watershed signs displayed. They are contracted to stay in place until 2022. The signs are titled "Our Urban Watershed" they are located at high traffic areas in five parks in Sammamish and explore the watershed we live in.

As part of the LID code integration process in late 2016, the City created new outreach materials for developers, contractors and property owners. These materials are available on the City's newly (2018) redesigned Stormwater Management Webpage

Additional Education and Outreach Activities:

In 2020 there will be a continued efforts and collaboration with the Sammamish Stormwater Stewards, which was created in 2017. This committee has helped to guide the City's efforts in outreach and provides a platform for brainstorming and networking of community groups and agencies. This year the Stewards will be working with the city; on the new stormwater pond retrofit program. The collaborations and partnerships created through this committee will help to facilitate future neighborhood stormwater projects.

- As part of the King Conservation District funding four public outreach pollution prevention booths are held annually; Kokanee Celebration, Earth Day, 4th on the Plateau, and Sammamish Days.
- Sammamish Spills Hotline for after-hours, non-emergency, reporting by citizens of spills, other illicit discharges, and polluters;

- Storm drain marking program containing the words "Puget Sound Starts Here: Only Rain Down the Drain"
- Storm Corner Kiosk located in the main lobby of City Hall with informative and educational pollution prevention brochures.
- Stormwater Program web page on the City's website. Advertising such outreach events as Don't Drip and Drive and Natural Yard Care.
- Private stormwater facility outreach brochures to commercial businesses to help private facility owners maintain stormwater systems.

The City participates in the Stormwater Outreach for Regional Municipalities (STORM) forum and the King County Stormwater Outreach Group (SOGgies) for regional public education and outreach efforts.

The City will continue to address issues and develop partnerships with groups such as King Conservation District and Sammamish Stormwater Stewards. These partnerships again in 2020 are expected to include regional and local efforts and outcomes. A Dumpster Summit to assess issues regionally on commercial dumpsters will be held in 2020. The goal of the summit will be to review existing programs, issues, potential audiences, BMP prioritization, and where to best focus our efforts. In addition, SOGgies will collaborate on regional bus ads in Metro King County "Only Rain Down the Drain" for Puget Sound Starts Here month in May of 2020.

PUBLIC INVOLVEMENT AND PARTICIPATION

Public input is important to the development and implementation of the SWMP. The city actively solicits public participation by making stormwater information available for review and providing opportunities for comment. This section summarizes the Phase II permit requirements for public involvement and participation and describes current activities the City has underway for public involvement and participation.

2013–2018 and 2019-2024 Phase II Permit Requirements

Section S5.C.2 of the 2013–2018 Phase II Permit and Section S5.C.3 of the 2019-2024 Phase II Permit require that the city create opportunities for the public to participate in the decision-making processes involving the development, implementation, and update of the SWMP, and comply with applicable state and local public notice requirements. The two main components include:

- Developing and implementing a process for consideration of public comments on the city's SWMP
- 2. Posting the Annual Report and the SWMP Plan, on the city's website no later than May 31 of each year.

Planned Activities

- 1 Community feedback —The City encourages public comment in the development and implementation of the City's SWMP. The process to obtain feedback continues at public meetings concerning NPDES Phase II requirements and through email, in writing, or by phone as indicated by the participation memo. The latest program document and annual report are posted on the City's website.
- 2 Water Quality Monitoring Strategy and Basin Planning The City developed web pages to share and receive information as well as give feedback on these strategies.
- 3. City of Sammamish's City Clerk's Office, Newsletter, and Website —The City uses the City Clerk's office for public notification of public meetings pertaining to Phase II requirements. The City uses the newsletter and website for notification of local stewardship and environmental activities/events/programs.
- 4. Stewardship The City plans to continue the storm drain marker program and has ongoing opportunities to volunteer in wetland and riparian restoration activities. There are typically ten planting activities organized through the Volunteer Coordinator in the Parks and Recreation department.

Continue Ongoing Public Involvement/Participation Strategies

Create opportunities for public involvement/community feedback

The City encourages public comment in the development and implementation of the City's SWMP. The process to obtain feedback continues at public meetings concerning Phase II requirements and through email, in writing, or by phone as indicated on the website.

Retain venues for public notification

The City has retained the following venues in an effort to keep its residents informed on development and implementation of the City's stormwater management program:

- 1) Stormwater Management Program webpage on the City's website. The City's new, user friendly website is up and available for feedback
- 2) Public meetings for public input: City Council meetings and public openhouses
- 3) Sammamish Community Events: Earth Day, Sammamish Farmer's Market, 4th on the Plateau and Sammamish Days

Address any public comment to the SWMP development

The City addresses comments with regard to SWMP development. However, no public comments were received during the reporting period specifically regarding SWMP development.

Post the SWMP document on the City's website along with contact information for comments

The latest SWMP document and annual report are posted on the City's website. The City encourages public comment in the development and implementation of the City's SWMP.

Comments can be addressed to:
Lisa Werre, Engineering Technician

801 228th Ave SE

Sammamish, WA 98075

425.295.0573

lwerre@sammamish.us

The city maintains a current electronic map of the MS4 here at Storm Bandit. https://cityofsammamish.maps.arcgis.com/apps/webappviewer/index.html?id=ebae614add6 a458481c0a7383538e7c7. This section describes the MS4 Mapping and Documentation Phase II Permit requirements, as well as the city's planned compliance activities for the 2019-2024 Phase II Permit cycle. The requirements and planned activities under the 2013-2018 Phase II Permit are described in the Illicit Discharge Detection and Elimination section.

2019–2024 Phase II Permit Requirements

Section S5.C.4 of the 2019–2024 Phase II Permit requires the City to include an ongoing program for mapping and documenting the MS4. The specific Phase II Permit requirements are as follows:

- 1. Maintain mapping data for these features:
 - a. Known MS4 outfalls and known MS4 discharge points
 - b. Receiving waters, other than ground water
 - c. Stormwater treatment and flow control BMPs/facilities owned or operated by the city
 - d. Geographic areas served by the MS4 that do not discharge stormwater to surface waters
 - e. Tributary conveyances and associated features to known outfalls and discharge points with a 24" diameter or equivalent cross-sectional area
 - f. Connections between the city's MS4 and other municipalities or public entities
 - g. All connections to the MS4 authorized or allowed by the city after March 16, 2007
- 2. Record mapping data for these features:
 - a. By January 1, 2020, where known, size and material for all known MS4 outfalls
 - b. By **August 1, 2021**, all known connections from the MS4 to privately owned stormwater systems
- 3. By **August 1, 2021**, record map electronically with fully described mapping standards.
- 4. Make maps available upon request to Ecology, federally recognized Tribes, municipalities, and other Permittees.

Planned Activities

Planned activities will include maintaining a map of existing required MS4 features. Mapping where known the size, material and known outfalls as well as known connections to the MS4 from private systems. Continue to provide mapping information to the public upon request.

ILLICIT DISCHARGE DETECTION AND ELIMINATION

An illicit discharge is defined as any discharge into the stormwater system that is not composed entirely of stormwater, or of non-stormwater discharges allowed as specified in the Phase II Permit. Illicit discharges may be from a variety of sources and activities including illegal dumping, sanitary sewer overflow, swimming pool cleaning, and incidental spills (such as oil, gas, diesel fuel, paints, or solvents). This section describes the Illicit Discharge Detection and Elimination (IDDE) Phase II Permit requirements, as well as the city's planned compliance activities.

2013–2018 Phase II Permit Requirements

Section S5.C.3 of the 2013–2018 Phase II Permit requires the city to include an ongoing IDDE Program designed to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the stormwater system. The specific Phase II Permit requirements are as follows:

- 1. Continuing mapping of the MS4 on an ongoing basis.
- 2. Publicize a public hotline number for reporting of spills and other illicit discharges; and track all calls and follow-up actions taken.
- 3. By March 2, 2018, adopt an updated ordinance that effectively prohibits non-stormwater, illegal discharges, or dumping into the city's stormwater system to the maximum extent allowable by state and federal law.
- 4. By **December 31, 2017**, complete field screening of 40 percent of the stormwater system. After **December 31, 2017**, the city is required to complete field screening on an average of 12 percent of the stormwater system per year.
- 5. Implement an ongoing program designed to address illicit discharges, including spills and illicit connections, which includes procedures for characterizing the nature and potential threats of an illicit discharge, procedures for tracing the source of an illicit discharge, and procedures for eliminating the discharge.
- 6. Implement an ongoing IDDE staff training program.
- 7. Distribute information to public employees, businesses, and the general public of the hazards associated with illicit discharges and improper disposal of wastes.

Section S5.C.5 of the 2019–2024 Phase II Permit requires the city to include an ongoing IDDE Program designed to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the stormwater system. The specific Phase II Permit requirements are as follows:

- 1. Implement a program with procedures to report and address illicit discharges including spills, and illicit connections, and procedures to address pollutants from an interconnected, adjoining MS4.
- 2. Inform public employees, businesses, and the general public of the hazards associated with illicit discharges and improper disposal of wastes.
- 3. Implement an ordinance that effectively prohibits non-stormwater, illicit discharges, into the city's stormwater system. Evaluate and update existing ordinances, as needed.
- 4. Implement and document a field screening method for illicit discharges and connections, complete screening an average of 12 percent of the stormwater system per year and track the total percentage of the MS4 screened between August 1, 2019 and December 31, 2023.
- 5. Publicize a public hotline number for reporting of spills and other illicit discharges; and track all calls and follow-up actions taken.
- 6. Implement an ongoing training program for municipal field staff on identification and reporting procedures.
- 7. Implement an ongoing program designed to address illicit discharges, including spills and illicit connections, which includes procedures for characterizing the nature and potential threats of an illicit discharge, procedures for tracing the source of an illicit discharge, and procedures for eliminating the discharge within specific timeframes.
- **8.** Implement an ongoing training program for staff responsible for identification, investigation, termination, cleanup and reporting.
- 9. Track and maintain records of IDDE activities following the Permit-specified format.

Planned Activities

Maintain Existing Programs

The City will maintain ongoing IDDE programs and update municipal stormwater system mapping, as well as investigate and remove illicit discharges and connections to the City storm system. These programs include:

- 1. Maintenance of the 24-hour Spills Hotline.
- 2. Staff training on the identification and reporting of illicit connections and discharges.
- 3. Newly updated Sammamish Municipal Code Chapter 13.30 lists prohibited discharges and gives the City the ability to enforce water quality violations.
- 4. The City's MS4 known wetlands, and receiving waters are in a GIS database. The City's Public Works Department frequently revises the GIS database to include new facilities or update existing data.
- Partner with ECOSS to provide spill kits and spill response education/training for restaurants.
- 6. The City has education and outreach outlets available to them that have been previously mentioned and that can complement activities required for an IDDE program. The City uses brochures, fact sheets, and applicable operational BMPs such as storm drain markers. The City will continue to coordinate these activities into the IDDE program.
- 7. The City has the capability through their Maintenance Department IDDE internal protocols to address any illicit discharges that the City is found responsible for. The internal IDDE process was updated in late 2017. These protocols include, when appropriate, notification, identification, investigation, cleanup and reporting.
- 8. The City staff in the City's Public Works Department participate in the Regional Road Maintenance Endangered Species Act Program and the Certified and Sediment Control Lead (CESCL). The City currently contracts for inspections of all catch basins in the right of way and City staff inspect all private and public facility catch basins for IDDE.
- 9. In 2019 it is anticipated that Cityworks will be utilized to record IDDE activities.
- 10. The City implemented a new cell phone application "My Sammamish" or "See Click Fix" for citizens and ease of reporting illicit discharges.
- 11. Other trainings are identified and provided on an as-needed basis for illicit discharges and illicit connections.

CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES

Community Development and Public Works Department share the responsibility for permitting and review, inspection, and code enforcement actions for private construction-related activities in the city. This section describes the Phase II Permit requirements related to controlling runoff from new development, redevelopment, and construction sites, including planned activities.

2013–2018 Phase II Permit Requirements

Section S5.C.4 of the 2013–2018 Phase II Permit requires that the city develop and implement a program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction activities. The specific Phase II Permit requirements are as follows:

- Implement an ordinance or ordinance revision that addresses runoff from new development, redevelopment, and construction sites and adopt Ecology's Stormwater Management Manual for Western Washington, or equivalent, by December 31, 2016. Include provisions to verify adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities.
- 2. Review all stormwater site plans for proposed development activities.
- 3. Conduct inspections of construction sites prior to clearing and construction, during construction, and upon completion of construction.
- 4. Conduct annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the stormwater system and were permitted by the city since 2010 (unless maintenance records justify a reduced inspection frequency).
- 5. Ongoing training program for staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites.
- 6. Review, revise, and make effective local development-related codes, rules, standards, or other enforceable documents to incorporate and require LID principles and LID BMPs by December 31, 2016. Submit a summary of the results of the review and revision process with the annual report due no later than March 31, 2017.

2019–2024 Phase II Permit Requirements

Section S5.C.6 of the 2019–2024 Phase II Permit requires that the city develop and implement a program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction activities. The specific Phase II Permit requirements are as follows:

- Implement an ordinance that addresses runoff from new development, redevelopment, and construction sites and adopt minimum requirements, thresholds and definitions in Appendix 1 of the Phase II Permit or approved program and amendments by **December 31**, 2021.
- 2. Review all stormwater site plans for proposed development activities.
- 3. Conduct inspections of construction sites prior to clearing and construction, during construction, and upon completion of construction.
- 4. Provide a link to state stormwater general permit NOI forms for construction and industrial sites.
- 5. Conduct ongoing training for staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites.

Planned Activities

Maintain Existing Programs (S5.C.4)

The City will continue to maintain existing development review and inspection programs as well as stormwater standards for controlling runoff from new development, redevelopment, and other construction sites in 2019.

Low Impact Development (LID) Integration (S5.C.4.f)

In addition to maintaining existing programs, the City is updating City codes, standards, policies and plans necessary to ensure LID techniques won't be limited by current policies. This work was completed prior to December 31, 2016.

Activities

The City of Sammamish currently has an active program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction site activities. The existing program currently applies to both public and private projects, including roads. The current compliance activities associated with the above permit requirements include:

- The current program has existing municipal codes and engineering design standards that are enforced through the current permit, plan review, and inspection processes to reduce pollutants from stormwater runoff.
- The City has adopted the 2016 KCSWDM.
- The City records and maintains inspections and enforcement actions by staff.
- There is a system of escalating enforcement procedures necessary to sustain the existing codes and standards throughout the construction/development process in S M C 13.20.130.
- All sites are inspected by the City prior to the start of construction, during construction, and post construction.
- Two useful map applications are provided for staff and citizens on the Sammamish
 Stormwater Web page. Storm Bandit has Sammamish Stormwater system detailed down to
 the pipe or catch basin and the Records vault has all approved construction plan sets.
 https://www.sammamish.us/government/departments/public-works/maps-and-gis-data/

OPERATIONS AND MAINTENANCE

City staff from Public Works are responsible for operations and maintenance of MS4 infrastructure. This section describes the Phase II Permit requirements related to operations and maintenance, including planned activities.

2013–2018 Phase II Permit Requirements

Section S5.C.5 of the 2013–2018 Phase II Permit requires the city to develop and implement an O&M program with the ultimate goal of preventing or reducing pollutant runoff from the municipal separate stormwater system and municipal O&M activities. The specific Phase II Permit requirements are as follows:

- 1. Implement maintenance standards that are at least as protective as those specified in Ecology's *Stormwater Management Manual for Western Washington*.
- Perform annual inspections of all city-owned or operated permanent stormwater treatment and flow control BMPs/facilities, other than catch basins, and take appropriate maintenance actions.
- Spot check potentially damaged permanent treatment and flow control BMPs/facilities (other than catch basins) after major storm events; and conduct maintenance and repairs as needed.
- 4. Perform routine catch basin and inlet inspections. Clean as needed based on maintenance standards.
- 5. Implement practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the city and road maintenance activities under the functional control of the city.
- 6. Implement an ongoing training program for city staff whose primary construction, operations, or maintenance job functions may impact stormwater quality.
- 7. Implement Stormwater Pollution Prevention Plans (SWPPPs) for all heavy equipment maintenance or storage yards and material storage facilities owned or operated by the city.
- 8. Maintain records of inspections and maintenance or repair activities.

2019–2024 Phase II Permit Requirements

Section S5.C.7 of the 2019–2024 Phase II Permit requires the city to implement an O&M program with training to prevent or reduce pollutant runoff from municipal O&M activities. The specific Phase II Permit requirements are as follows:

- 1. Implement maintenance standards that are at least as protective as those specified in Ecology's *Stormwater Management Manual for Western Washington*. No later than **December 31, 2021**, update maintenance standards as needed.
- 2. Implement provisions to verify adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities.
- 3. Conduct annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the stormwater system and were permitted by the City since 2010 (unless maintenance records justify a reduced inspection frequency).
- 4. Conduct inspections of all stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments every six months until 90% of the lots are constructed.
- 5. Perform annual inspections of all city-owned or operated permanent stormwater treatment and flow control BMPs/facilities, other than catch basins, and take appropriate maintenance actions (unless maintenance records justify a reduced inspection frequency).
- Spot check potentially damaged permanent treatment and flow control BMPs/facilities (other than catch basins) after major storm events; and conduct maintenance and repairs as needed.
- 7. Perform routine catch basin and inlet inspections. Clean as needed based on maintenance standards.
- 8. Implement and document practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the city and road maintenance activities under the functional control of the city.
- Implement an ongoing training program for city staff whose primary construction, operations, or maintenance job functions may impact stormwater quality.
- 10. Implement Stormwater Pollution Prevention Plans (SWPPPs) for all heavy equipment maintenance or storage yards and material storage facilities owned or operated by the city.
- 11. Maintain records of inspections, maintenance, repair, and enforcement activities.

Planned Activities

- 1. The City conducts annual inspection of all municipally owned or operated permanent stormwater treatment and flow control facilities. If necessary, inspections are followed by maintenance to ensure continued functionality. The maintenance schedule is:
 - Within 1 year for typical facility maintenance, except catch basins
 - Within 6 months for catch basins
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.
- 2. The City conducts spot checks of potentially damaged permanent treatment and flow control facilities, after major (greater than 24-hour-10-year recurrence interval rainfall) storm events. If spot checks reveal widespread damage/maintenance needs, inspect all stormwater treatment and flow control facilities that may be affected.
- 3. Catch basins are inspected and maintained, if necessary, once every two years. Inspection of all catch basins was completed by August 1st, 2017.
- 4. At least 95 percent of all sites where inspection is required, either cyclically or storm-event related are inspected.
- 5. The City is continuing practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads, or highways owned or maintained by the City and road maintenance activities conducted by the City. The following activities are addressed:
 - Ditch maintenance
 - Cleaning of culverts that convey stormwater in ditch systems
 - Pipe cleaning
 - 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 fertilizer, pesticides, and herbicides, as well as 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.
- 6. The City provides ongoing training for employees of the City whose construction, operation or maintenance job functions may affect stormwater quality.
 - Records of inspections and maintenance or repair activities conducted by the City are documented.
 - City maintenance crews are responsible for spills response. Although City crews are primarily responsible for spills within the right-of-way, they are often the first group to respond to spills reporting regardless of where they are located. Spill kits are provided in city maintenance vehicles to address minor spills. Assistance would be sought out in the event that spill kits could not contain quantities that exceed its capacity.
 - The City provides training for staff on operation and maintenance activities such as ESA Track 3 (Regional Road Maintenance ESA training), and Municipal Stormwater Pollution Prevention.

SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT

This section describes the Source Control Program for Existing Development Phase II Permit requirements, as well as the city's planned compliance activities. There are no requirements or planned activities under the 2013-2018 Phase II Permit.

2019–2024 Phase II Permit Requirements

Section S5.C.8 of the 2019–2024 Phase II Permit requires the city to apply operational and structural BMPs, and treatment BMPs if needed, to existing sources, inspect and enforce BMP implementation at commercial and industrial properties, apply and enforce local ordinances at sites, and implement practices to reduce polluted runoff from pesticide, herbicide, and fertilizer applications. The specific Phase II Permit requirements are as follows:

- 1. By **August 1, 2022**, adopt an ordinance to require source control BMPs for pollutant generating sources.
- 2. By **August 1, 2022**, establish an inventory of commercial and industrial properties with pollutant generating potential.
- 3. By **January 1, 2023**, implement an inspection program for sites identified in the inventory.
 - a. Provide sites with information about pollutant generating activities
 - b. Annually complete the number of inspections equal to 20% of the businesses and/or properties listed in the inventory and inspect all sites identified through complaints
- 4. By **January 1, 2023**, implement a progressive enforcement policy that includes documented follow-up actions and follow-up inspections.
- 5. Conduct training for staff responsible for implementing the source control program.

Planned Activities subject to change based on the final 2019 Permit requirements

- 1. The City will develop an ordinance to require source control BMPs for pollutant generating sources on existing development by August 1, 2022.
- 2. The City will develop an inventory of pollutant generating business and/or properties by August 1, 2022.
- 3. The City will inform business on pollutant generating activities and applicable source control requirements by January 1, 2023.
- 4. The City will annually inspect an equivalent number of 20% of businesses by January 1, 2023.
- 5. The city implements follow up actions and inspections by January 1, 2023.
- 6. The City pursue training opportunities for source control program staff.

TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

This section provides a brief discussion of the Phase II Permit total maximum daily load (TMDL) requirements.

2013–2018 and 2019-2024 Phase II Permit Requirements

Section S7 of the NPDES Phase II Permit lists the following requirements:

- 1. Implement the specific requirements identified in Appendix 2 of the Phase II Permit for applicable TMDLs listed in Appendix 2.
- 2. Compliance with the permit constitutes compliance with applicable TMDLs not listed in Appendix 2 of the Phase II Permit.
- 3. Comply with permit modifications and TMDL implementation plans prepared by Ecology for TMDLs that are approved by the US Environmental Protection Agency (EPA) after the Phase II Permit has been issued.

Planned Activities

The city is currently not affected by any TMDLs listed in Appendix 2 of the NPDES Phase II Permit.

MONITORING

This section provides a brief discussion of the Phase II Permit monitoring requirements, including planned activities.

2013–2018 Phase II Permit Requirements

Section S8 of the 2013–2018 Phase II Permit requires the city to do the following:

- 1. Provide a description of any stormwater monitoring or stormwater-related studies conducted during the reporting period
- 2. Pay into a collective fund to implement a Regional Stormwater Action Monitoring (SAM) that includes the following three components:
 - Status and trends monitoring
 - Stormwater management program effectiveness studies
 - Source identification and diagnostic monitoring

Planned Activities

The city decided to opt in to the SAM and started contributing to the SAM fund beginning in August 2014. Annual payments into the SAM, begun in August 2014, include the following:

- Status and trends monitoring: \$10,028.00
- Stormwater management program effectiveness studies: \$16,709.00
- Source identification and diagnostic monitoring: \$1,550.00
- Annual Total: \$28,287.00

2019–2024 Phase II Permit Requirements

Section S8 of the 2019–2024 Phase II Permit requires the city to do the following:

- 1. For the previous permit cycle, pay into a collective fund to implement regional status and trends monitoring and effectiveness and source control identification studies by **December 1, 2019**.
- 2. For the current permit cycle, by **December 1, 2019**, notify Ecology of the city's intent to pay into a collective fund to implement the following programs:
 - Regional status and trends monitoring
 - Stormwater management program effectiveness and source identification studies or conduct stormwater discharge monitoring.
- 3. Submit records of SWMP activities tracked and/or maintained in response to requests by the Stormwater Action Monitoring Coordinator.

The city is not required to conduct water quality monitoring for compliance with total maximum daily loads (TMDLs) pursuant to Section S7 and Appendix 2 of the Phase II Permit, since the city is currently not affected by any TMDLs listed in Appendix 2 of the NPDES Phase II Permit.

Planned Activities

The city plans to continue to opt in to the collective fund and start contributing to it with the 2019-2024 Permit.

REPORTING

This section provides a brief discussion of Phase II Permit reporting requirements, including planned activities.

2013–2018 and 2019-2024 Phase II Permit Requirements

Section S9 of the 2013–2018 Phase II Permit and 2019-2024 Phase II Permit list the following requirements:

- 1. Submit an annual report to Ecology no later than March 31 of each year (beginning in 2015 and 2020 for the 2013-2018 Phase II Permit and 2019-2024 Phase II Permit, respectively).
- 2. Keep all records related to the NPDES Phase II Permit and the SWMP for at least 5 years.
- 3. Make records related to the NPDES Phase II Permit and the SWMP available to the public at reasonable times during business hours.

Planned Activities

The city plans to meet all of the reporting requirements outlined in the 2013–2018 Phase II Permit and 2019-2024 Phase II Permit.