Olympia

City of Olympia

2020 Stormwater Management Program Plan (SWMP Plan)

TABLE OF CONTENTS

| Introduct | ion | 2 |
|------------|---|----|
| Purpos | e of the Stormwater Management Program Plan (SWMP Plan) | 2 |
| Implen | nentation Timing | 2 |
| Olympi | a Storm and Surface Water Utility – Other Activities | 2 |
| | nship to Other Plans | |
| | rmit as Document Map | |
| | ter Planning | |
| | - | |
| | Education and Outreach | |
| Public I | Involvement in SWMP Plan Development | б |
| Mapping | and Documentation | 6 |
| Illicit D | ischarge Detection and Elimination (IDDE) | 7 |
| Contro | lling Runoff from New Development, Redevelopment and Construction Sites | 9 |
| Operat | ions and Maintenance | 11 |
| - | ontrol Program for Existing Development | |
| | nation | |
| | | |
| | ance with Total Maximum Daily Load (TMDL) Requirements | |
| Monito | oring and Assessment | 16 |
| Glossary. | | 18 |
| | | |
| LIST OF TA | ABLES | |
| Table 1 | 2021 Stormwater Planning | |
| Table 2 | 2021 Public Education and Outreach | |
| Table 3 | 2021 Public Involvement in SWMP Plan Development | |
| Table 4 | 2021 MS4 Mapping | |
| Table 5 | 2021 Illicit Discharge Detection and Elimination | |
| Table 6 | 2021 Controlling Runoff from New Development, Redevelopment and Construction Site | !S |
| Table 7 | 2021 Pollution Prevention and Operation and Maintenance for Municipal Operations | |
| Table 8 | 2021 Source Control Program for Existing Development | |
| Table 9 | 2021 Coordination | |
| Table 10 | 2021 Total Maximum Daily Load | |
| Table 11 | 2021 Monitoring and Assessment | |

Introduction

Purpose of the Stormwater Management Program Plan (SWMP Plan)

All stormwater runoff flowing through Olympia's catch basins, pipes, ponds, and ditches is managed according to the requirements of a permit first issued by the Washington State Department of Ecology (Ecology) in January of 2007. The Western Washington Phase II Municipal Stormwater Permit; National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for discharges from Small Municipal Separate Storm Sewers in Western Washington (Permit) requires the City to take actions such as; educating the public and encouraging non-polluting behaviors, responding to spills, looking for illegal dumping and cross-connections, enforcing erosion and sediment control at construction sites, and using best practices for land management and stormwater system maintenance.

This Stormwater Management Program Plan (SWMP Plan) is designed to reduce the discharge of pollutants from Olympia's regulated MS4 (municipal separate storm sewer system) to the maximum extent practicable, meet state AKART (all known and reasonable technologies) requirements, and protect water quality.

Implementation Timing

The City of Olympia currently operates under the 2019-2024 NPDES Permit. The permit was re-issued July 1, 2019 and became effective August 1, 2019. This is the third generation of the NPDES Permit.

Olympia Storm and Surface Water Utility - Other Activities

The Utility maintains over 157 miles of underground pipe, over 7,600 storm drains, and 50 stormwater ponds that carry stormwater runoff from roads and rooftops to our streams and Budd Inlet. We work on many levels to prevent flooding and protect water quality and aquatic habitat. This involves working closely with residents, businesses and other government agencies to maintain a safe and healthy environment for people and wildlife.

Relationship to Other Plans

The Storm and Surface Water Utility is guided by the 2018 Storm and Surface Water Plan (Plan). The Plan was adopted on April 10, 2018 by the Olympia City Council. This Plan aligns with Olympia's Comprehensive Plan and focuses on the programs and policies of the Utility. This SWMP Plan represents a subset of the work performed by the Utility; specifically, those areas that are governed by the Permit.

The Permit as Document Map

This SWMP Plan generally follows section S5 of the Permit and is required to be updated each year. Planned activities will move to current activities when they are scheduled as work items for the upcoming calendar year. The current activities listed are the City's ongoing, permit-related programs and practices.

The remainder of this document details the required elements of the SWMP Plan as noted in condition S5.C of the Permit and notes current and planned compliance activities.

Stormwater Planning

Permit Requirements

Permit section S5.C.1 Stormwater Planning is a new program requirement for the NPDES Permit. This program will inform and assist in the development of policies and strategies as water quality management tools to protect receiving waters. Specific requirements include the following:

- Convene an interdisciplinary team to inform and assist in the development, implementation and influence of this program.
- Prepare a report describing how stormwater management needs and protection and/or improvement of receiving water health are (or are not) informing the planning update processes and influencing policies and implementation strategies.
- Continue to require LID Principles and LID BMPs when updating, revising and developing new local development-related codes, rules, standards, or other enforceable documents as needed.
- Conduct a receiving water assessment documenting and assessing existing information related to local receiving waters and contributing area conditions, to identify which receiving waters are most likely to benefit from stormwater management planning.
- Informed by the receiving water assessment, develop and implement a prioritization method and process to determine which receiving waters will receive the most benefit from implementation of stormwater facility retrofits, tailored implementation of SWMP actions, and other land/development management actions (different than the existing new and redevelopment requirements S5.C.6)
- Develop a Stormwater Management Action Plan (SMAP) for at least one high-priority catchment area.

Current Activities

Community Planning & Development, Parks, Arts and Recreation, and Public Works departments developed a Charter to meet the NPDES stormwater planning requirements. Multiple meetings and discussions with group members have taken place. This team has been working to answer permit planning questions by reviewing existing long-range plans and are developing ideas on incorporating stormwater management goals into future plans. Scoping for the receiving water assessment, basin prioritization, development of a detailed basin action plan and associated public involvement process is underway.

Planned Activities

Activities planned for the Stormwater Planning process for continued compliance with Permit section S5.C.1 are listed in Table 1 below.

Table 1 – 2021 Stormwater Planning

| Action Item | Staff Involved | Schedule Notes |
|--|-------------------------------------|--------------------------------------|
| Report how water quality is being addressed, if at all, during this permit term in updates to the comprehensive plan. | SSW Utility, CP&D Planning Staff | Due no later than January 1, 2023 |
| Continue to require LID principles and LID BMPs when updating and developing new local development-related codes, rules, | SSW Utility, CP&D Planning Staff | Ongoing |

| Action Item | Staff Involved | Schedule Notes |
|---|------------------------------|-----------------------------|
| standards, or other enforceable | | |
| documents as needed. | | |
| Develop a watershed inventory and | SSW Utility | Due no later than March 31, |
| include a brief description of the relative | | 2022 |
| conditions of the receiving waters and the | | |
| contributing areas. | | |
| Develop and implement a receiving water | SSW Utility, Transportation, | Due no later than June 30, |
| prioritization method for stormwater | Parks Staff | 2022 |
| retrofits. | | |
| Develop a Stormwater Management | SSW Utility, CP&D Planning | Due no later than March 31, |
| Action Plan (SMAP) for at least one high | Staff | 2023 |
| priority catchment area. | | |

Public Education and Outreach

Permit Requirements

Permit section S5.C.2 outlines the required elements of a public education and outreach program. Specifically:

- To build general awareness, select one target audience and one subject area from a list of identified audiences within the permit.
- To affect behavior change, a minimum of one target audience and one BMP from those listed in the permit will be used to develop a community-based social marketing campaign and program evaluation plan.
- Create stewardship opportunities and encourage residents to participate in activities or events, such as: Stream Team, storm drain marking, volunteer monitoring, riparian plantings and education activities.
- Summarize public education and outreach efforts annually and submit with an Annual Report.

Current Activities

The Olympia Storm and Surface Water Utility has a long-standing and robust public outreach and education program. Following are some of the current activities of our program:

- Contribute to the production of a quarterly Stream Team newsletter with regional distribution electronically to over 2,000 community members.
- Feature stormwater-related messaging in the City's "Five Things" Utility Bill Insert, which is
 produced every two months. Articles include pet waste, car washing, keeping storm
 drains clear, natural lawn care, street sweeping, spills hotline, and private stormwater
 facility maintenance.
- Distribute and install pet waste stations. Eight pet waste stations were installed in 2020. We also distributed 11,500 pet waste brochures to local licensed pet owners via joint animal services.
- Provide cost share incentives to encourage the construction of rain gardens.
- Promote natural lawn care videos on City of Olympia and Stream Team websites and publications. Emailed quarterly natural lawn care tips to 267 residents.

- Continue to work with the adjacent local jurisdictions, the Cities of Lacey and Tumwater and Thurston County, to produce regional education materials and campaigns. This programming is governed by an interlocal government agreement (ILA) know as Regional Environmental Education Partnership (REEP).
- Thurston REEP/Stream Team Puget Sound Starts Here Lights, Camera, Actions for Clean Water video contest: https://streamteam.info/stream-team-video-contest/
- 2020 Water Resources Stewardship Through Art calendar The calendar raises awareness
 of Stormwater Pollution Prevention and Water Conservation best practices. Olympia middle
 school students were invited to submit art depicting one of 12 key messages. Artwork was
 selected and used for the BMP message it depicts. Students and their families receive City
 Council recognition and a pizza party.
- Regional Puget Sound Starts Here Digital Media Campaign 2020 Pet waste pick-up, natural yard care and vehicle leaks "Certain Things Don't Mix" videos. Olympia had over 41,000 completed video views including Spanish, Vietnamese and Korean audiences. Developed a strategy and schedule for a new target audience and behavior change campaign. This campaign focuses on increasing adoption of dumpster area best management practices (BMPs) by businesses to prevent water quality violations.

The activities in Table 2 are planned for 2021, continuing Olympia's leadership and commitment to excellence in water quality programming.

Table 2 - 2021 Public Education and Outreach

| Action Item | Target Audience | Goal and/or Behaviors Promoted |
|---|--|--|
| General awareness | General public or businesses | General stormwater impacts on surface waters, low impact development (LID) principles and BMPs. |
| General awareness | Engineers, contractors, developers, or land use planners | Technical standards for stormwater site and erosion control plans, LID principles and LID BMPs, stormwater treatment and flow control BMPs/facilities. |
| Behavior change | Businesses | Use and storage of hazardous materials; prevention of illicit discharges; repair and maintenance BMPs for buildings, dumpster and trash compactor maintenance; litter and debris prevention, and source control BMPs. |
| By April 1, 2021 Implement the Community Based Social Marketing (CBSM) strategy | Businesses | Implement CBSM Dumpster BMP Strategy. |
| By March 31, 2024 submit report on CBSM strategy | Businesses | Evaluate and report on changes in understanding and adoption of targeted behaviors resulting from the implementation of the CBSM strategy, and any planned or recommended changes to the campaign in order to be more effective. |

| Action Item | Target Audience | Goal and/or Behaviors Promoted |
|-------------|-----------------|--|
| Stewardship | Community | Provide and advertise opportunities which encourage residents to participate in Stream Team and Parks, Arts and Recreation volunteer activities and events, including restoration planting projects. |

Public Involvement in SWMP Plan Development

Permit Requirements

The Permit (section S5.C.3) requires the following:

- Create opportunities for the public to participate in the decision-making processes involving the development, implementation and update of the SMAP and SWMP.
- Make the SWMP Plan and Annual Report available to the public, including on the City's website.

Current Activities

The most recent SWMP Plan is posted on the City's website, along with the most current Annual Permit Compliance Report.

Planned Activities

Activities planned for continued compliance with Permit section S5.C.3 are listed in Table 3 below.

Table 3 – 2021 Public Involvement in SWMP Plan Development

| Action Item | Staff Involved | Schedule Notes |
|--|------------------------------|----------------------------|
| Present the 2021 SWMP Plan to the City's | SSW Utility | Scheduled for March 2021 |
| Utility Advisory Committee and provide | | Utility Advisory Committee |
| opportunity for public comment. | | meeting. |
| Post the 2021 SWMP Plan on the City's | SSW Utility | To be completed by May 31, |
| website. | | 2021. |
| Update the SWMP Plan for 2022 planned | SSW Utility, in coordination | Begin December 2021. |
| activities. | with other City staff | |

Mapping and Documentation

Permit Requirements

The Permit (section S5.C.4) requires the City to include an ongoing program for mapping and documenting the MS4.

- Ongoing mapping requirements for:
 - o Known MS4 outfalls and known MS4 discharge points.
 - Receiving waters, other than groundwater.
 - Stormwater treatment and flow control BMPs/facilities owned or operated by the City.
 - Geographic areas served by the MS4 that do not discharge stormwater to surface waters.

- Tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems.
- Connections between adjacent jurisdictions.
- All connections to the MS4 authorized or allowed after February 16, 2007.
- Collecting size and material for all known MS4 outfalls during normal course of business (e.g. during field screening, inspections, or maintenance) and update records.
- New Mapping requirements:
 - Complete mapping of all known connections from the MS4 to a privately-owned stormwater system.
 - Required format for mapping is electronic (e.g. Geographic Information System GIS, etc.) with fully described mapping standards.

Current mapping activities that are part of ongoing permit compliance include:

- Olympia maintains a GIS database of the MS4. Mapping of the public/private stormwater system continues. Standard procedures are in place for maintaining the GIS database to document new connections, changes/alterations to the existing system, and corrections based on field verification. Drainage areas and land use have been identified for outfalls 24" or greater in size. Maps are available to Ecology and other permittees (NPDES permitted jurisdictions) upon request.
- MS4 field screening is accomplished through multiple methodologies, including but not limited to video inspections, catch basin/manhole inspections, ditch inspections, and stormwater best management practices (BMP) inspections.

Planned Activities

Activities planned for continued compliance with Permit section S5.C.4 are listed in Table 4 below.

Table 4 – 2021 MS4 Mapping

| Action Item | Staff Involved | Schedule Notes |
|--|----------------|-------------------------------------|
| Complete mapping of all known connections from the MS4 to a privately owned stormwater system. | SSW Utility | Due no later than August 1, 2023 |
| Required format for mapping is electronic with fully described mapping standards. | SSW Utility | Due no later than August 1, 2021 |

Illicit Discharge Detection and Elimination (IDDE)

Permit Requirements

The Permit (section S5.C.5) requires the City to implement an ongoing program to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into the MS4.

• The program shall include procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when they are suspected or identified. The

- program shall also include procedures for addressing pollutants entering the MS4 from an interconnected, adjoining MS4.
- Inform public employees, businesses, and the public of hazards associated with illicit discharges and improper disposal of waste.
- Implement a regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the stormwater system to the maximum extent allowable under state and federal law.
 Include escalating enforcement procedures and actions.
- Implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the stormwater system.
- Implement a compliance strategy that includes informal compliance actions, as well as the enforcement provisions of the regulatory mechanism.
- Implement a field screening methodology appropriate to the characteristics of the MS4 and water quality concerns.
 - Complete field screening for an average of 12% of the MS4 and track total percentage screened each year.
- Publicly list and publicize a hotline for public reporting of spills and other illicit discharges.
- Implement an ongoing training program for all municipal field staff who might come into contact with or observe an illicit discharge.
- Implement an ongoing program to address illicit discharges into the MS4. Program elements should include:
 - Procedures for characterizing the nature of any illicit discharge. Procedures shall address
 the evaluation of whether the discharge must be immediately contained and steps to be
 taken for containment of the discharge.
 - Procedures for tracing the source of an illicit discharge.
 - Procedures for eliminating the discharge.
- Train staff responsible for identification, investigation, termination, cleanup, and reporting
 of illicit discharges and illicit connections to conduct these activities. Conduct follow-up
 training as needed to address changes in procedures, techniques, requirements or staffing.
- In the Annual Report, submit data for the illicit discharges, spills and illicit connections
 including those that were found by reported to, or investigated during the previous calendar
 year.

Current illicit discharge detection and elimination (IDDE) activities that are part of ongoing permit compliance include:

- Olympia Municipal Code chapter 13.16 prohibits illicit discharges and provides for escalating enforcement.
- MS4 field screening is accomplished through multiple methodologies including but not limited to CCTV video pipe inspections, catch basin/manhole inspections, ditch inspections, and stormwater BMP (best management practices) inspections.
- The City advertises a Spills Hotline (360-753-8333) to the public for reporting spills and illicit discharges. Records are kept of calls and emails received, and follow-up actions are taken by City staff to investigate and respond appropriately.
- Basic spills identification and reporting training was developed in July 2017 and has been
 included as part of the City's new employee orientation training. All new hires to the City of
 Olympia are required to take this training.

In addition to continuing the IDDE programs required previously by the Permit, the activities in Table 5 are planned for 2021.

Table 5 – 2021 Illicit Discharge Detection and Elimination

| Action Item | Staff Involved | Schedule Notes |
|---|---------------------------|---|
| Continue to refine and implement the Illicit Discharge Detection and Elimination program. | SSW Utility | Ongoing |
| Continue to provide IDDE training. | All municipal field staff | Ongoing |
| Continue to televise and condition-rate stormwater pipe. | SSW Utility | Approximately 50,000 lineal feet of pipe will be screened in 2021. |
| Required to field screen 12% of the MS4 each year. | SSW Utility | Total of 51% of MS4 screened since August 1 st , 2019 (total of 93% since 2013). |

Controlling Runoff from New Development, Redevelopment and Construction Sites

Permit Requirements

The Permit (section S5.C6) requires Olympia to implement and enforce a program to reduce pollutants in stormwater runoff from new development, redevelopment and construction sites. The program applies to private and public development, including transportation projects.

Specifically:

- Implement an ordinance that addresses runoff from new development, redevelopment and construction site projects.
- Adopt and make effective a local program, no later than June 30, 2022, that meets the requirements of Appendix 1 of the NPDES Permit and shall apply to all applications submitted:
 - o On or after July 1, 2022
 - o Prior to January 1, 2017, that have not started construction by January 1, 2022
 - o Prior to July 1, 2022, that have not started construction by July 1, 2027.
- Include a permitting process with site plan review, inspection and enforcement capability that meets standards listed in the NPDES permit.
- Review all stormwater site plans for proposed development activities.
- Inspect, prior to clearing and construction, all permitted development sites that have a high potential for sediment transport as determined through plan review.
- Inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls.
- Manage maintenance activities to inspect 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.
- 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 the responsibility for maintenance is assigned for stormwater treatment and flow control BMPs/facilities.

- Compliance with the inspection requirements 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 required inspections.
- 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.
- An enforcement strategy shall be implemented to respond to issues of non-compliance.
- Require legal authority to inspect private stormwater facilities and enforce maintenance standards.
- Conduct post-construction inspections to ensure proper installation of stormwater system elements.
- Make available the "Notice of Intent for Construction Activity" to representatives of
 proposed new development and redevelopment. Continue to enforce local ordinances
 controlling runoff from sites that are covered by other stormwater permits issued by
 Ecology.
- Train 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. Conduct follow-up training as needed to address changes to procedures, techniques or staffing. Keep training records.

For many years, Olympia has had a program to control stormwater runoff from new development, redevelopment and construction sites. The following are some of Olympia's ongoing program activities.

- The Drainage Design and Erosion Control Manual for Olympia is equivalent to the Department of Ecology's 2012 Stormwater Management Manual for Western Washington. City staff are in the process of updating this manual to Ecology's 2019 standards.
- Community Planning and Development and Public Works departments coordinate a program to review development plans, inspect sites during construction, and to take enforcement action when necessary.
- Records of reviews, construction inspections, and enforcement actions are maintained by both Community Planning and Development and Public Works department staff.
- The Notice of Intent for Construction Activity and Notice of Intent for Industrial Activity
 applications are available for project applicants on the City's development applications
 online web portal SmartGov.
- Staff receive training on erosion control, LID techniques, and stormwater design, inspection and modeling on an ongoing basis as needed.
- Post-construction inspections of private stormwater systems are performed by storm and surface water staff, according to the Permit's regulated timelines. Records of these inspections and maintenance compliance are maintained by storm and surface water staff.

Planned Activities

The activities listed in Table 6 below are planned for 2021 to continue our compliance with permit requirements.

Table 6 – 2021 Controlling Runoff from New Development, Redevelopment and Construction Sites

| Action Item | Staff Involved | Schedule Notes |
|--|---------------------------|-------------------|
| Continue to refine and implement Olympia's program | Community Planning & | Ongoing |
| to control runoff from new development, | Development, SSW Utility, | |
| redevelopment and construction sites. | PW Engineering | |
| Adopt a program that meets requirements of | Community Planning & | Due no later than |
| Appendix 1 in the NPDES Permit. Updating City of | Development, SSW Utility, | June 30, 2022 |
| Olympia's Drainage Manual. | PW Engineering | |

Operations and Maintenance

Permit Requirements

The Permit (section S5.C.7) requires the City to:

- Implement maintenance standards at least as protective as those specified in Volume V, Chapter 4 of the 2012 Stormwater Management Manual for Western Washington.
- Develop a maintenance standard for facilities which have none.
- For private stormwater facilities, implement an enforceable mechanism that clearly identifies the party responsible for maintenance in accordance with maintenance standards, requires inspection of facilities, and establishes enforcement procedures.
- Ensure at least 80% of required inspections are achieved for facilities permitted in accordance with requirements adopted pursuant to Ecology municipal stormwater permits (2007-present).
- Perform annual inspections of all municipally-owned or operated permanent stormwater treatment and flow control BMPs/facilities and take appropriate maintenance actions in accordance with maintenance standards.
- Perform spot checks of potentially damaged, permanent stormwater treatment, and flow control BMPs/facilities after major storm events. Conduct repairs or take appropriate maintenance action in accordance with maintenance standards, based on the results of the inspections.
- Inspect all catch basins and inlets owned or operated by the City every two years. Clean catch basins if the inspection indicates cleaning is needed, to comply with the maintenance standard. Properly dispose of decant water (water that has separated from sludge and is removed from the layer of water above the settled sludge).
- Implement and document practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the City, including road maintenance activities under functional control of the City.
- Implement an ongoing training program for employees whose primary construction, operations or maintenance job functions may impact stormwater quality.
- Implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards and material storage facilities owned by the City.
- Ensure SWPPPs include:
 - A detailed description of the operational and structural BMPs in use at the facility, and a schedule for implementation of additional BMPs when needed.
 - Annual inspections of the facility, including visual observations of discharges, to evaluate the effectiveness of the BMPs, identify maintenance needs, and determine if additional or different BMPs are needed.

- An inventory of the materials and equipment stored on-site, and the activities conducted at the facility which may be exposed to rain or runoff, which could result in stormwater pollution.
- A site map showing the facility's stormwater drainage, discharge points, and areas of potential pollutant exposure.
- A plan for preventing and responding to spills at the facility which could result in an illicit discharge.
- Maintain records of inspections and maintenance or repair activities.

The following ongoing programs have been developed to comply with permit requirements.

- Publicly owned and operated stormwater treatment and flow control facilities are inspected annually. If an inspection identifies exceedance of an applicable maintenance standard, the timelines in S5.C.5.a.ii are followed.
- Catch basins are inspected and cleaned when the maintenance standard is exceeded, on a schedule that meets Permit requirements. Of the 7,608 known catch basins, over 4,438 (58%) were inspected and cleaned in 2020.
- An abbreviated Erosion Control Plan is used for ground disturbing work when affecting more than 100 square feet of earth and any saw cutting or ditching activities occur.
- Staff plan to convene a group similar to the interdisciplinary team to take on the task of updating SOPs.
- Ongoing pollution prevention training is provided to municipal maintenance and operations field staff.
- SWPPPs have been developed and are continuously implemented at the Olympia Public Works Maintenance Center and Olympia Parks' Priest Point Park maintenance facilities. Staff will review existing SWPPPs to determine whether updates are needed.
- Staff maintains a "hot spot" list of potentially vulnerable stormwater infrastructure. These sites are monitored during and after major storm events.

Planned Activities

Activities planned for 2021 in order to continue compliance with permit requirements are listed in Table 7 below.

Table 7 – 2021 Pollution Prevention and Operation and Maintenance for Municipal Operations

| Action Item | Staff Involved | Schedule Notes |
|--|---------------------------------|-------------------|
| Continue to implement and refine pollution prevention and operation and maintenance activities | SSW Utility, O&M staff citywide | Ongoing |
| and programs. | | |
| Provide construction stormwater BMP training. | SSW Utility, O&M staff citywide | Ongoing |
| Develop maintenance standards for facilities which | SSW Utility, O&M staff | Due no later than |
| have none. | citywide | June 30, 2022 |
| Document practices, policies, and procedures to | SSW Utility, O&M staff | Due no later than |
| reduce stormwater impacts. | citywide, Transportation, | December 31, 2022 |
| | Facilities | |
| Update site SWPPPs as necessary. | SSW Utility, Facilities, | Due no later than |
| | Fire, Waste ReSources | December 31, 2022 |

Source Control Program for Existing Development

Permit Requirements

The Permit (section S5.C.8) requires the City to implement a program to prevent and reduce pollutants in runoff from areas that discharge to the MS4.

The program shall include:

- Application of operational source control BMPs, and if necessary, structural source control BMPS or treatment BMPs/facilities or both, to pollution-generating sources associated with existing land uses and activities.
- Inspections of pollution-generating sources at publicly and privately-owned institutional, commercial and industrial sites to enforce implementation of required BMPs to control pollution discharging into the MS4.
- Practices to reduce polluted runoff from the application of pesticides, herbicides, and fertilizers from the sites identified in the inventory.
- No later than August 1, 2022, adopt and make effective an ordinance(s), or other
 enforceable documents, requiring the application of source control BMPs for pollutantgenerating sources associated with existing land uses and activities.
 - Operational source control BMPs shall be required for all pollution-generating sources.
 - Structural source control BMPs, or treatment BMPs/facilities, or both, shall be required for pollution-generating sources if operational source control BMPs do not prevent illicit discharges or violations of surface water, groundwater, or sediment management standards because of inadequate stormwater controls.
- Establish an inventory that identifies publicly and privately-owned institutional, commercial and industrial sites which have the potential to generate pollutants to the MS4.
- Implement an inspection program for sites identified pursuant to S5.C.8.b.ii.
 - All identified sites with a business address will be provided information about activities that may generate pollutants and the source control requirements applicable to those activities.
 - The City will annually complete the number of inspections equal to 20% of the businesses and/or sites listed in the source control inventory to assess BMP effectiveness and compliance with source control requirements.
 - o Inspect 100% of sites identified through credible complaints.
- Implement a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable time period.
- Train staff who are responsible for implementing the source control program to conduct these activities.

Current Activities

The following activities have been developed in order to meet permit requirements.

• Staff began working in early 2019 with other municipal stormwater agencies to develop and establish a Western Washington Workgroup identified as the Business Inspection Group (BIG). This vibrant and productive group of over 35 phase I and II municipalities worked together to develop and publish the <u>Business Inspection Program Report</u> in January 2020. Following the successful release of this report, the group then established a goal to submit a letter of intent and funding proposal to the Stormwater Action Monitoring Effectiveness studies for priority funding. The \$280k proposal was selected by the Stormwater Work Group (SWG) in November 2020. The proposal includes creating a guidance manual for

- developing and refining source control inspection programs for businesses along with training.
- Olympia has an Integrated Pest Management (IPM) Plan that was developed by the Olympia Parks Department. The SSW Utility coordinates all noxious weed control work on City ROW and fee-simple properties in accordance with this IPM plan.

Activities planned for 2021 in order to continue compliance with permit requirements are listed in Table 8 below.

Action Item

Staff Involved

Schedule Notes

Adopt and make effective an ordinance(s) or other enforceable documents.

Establish an inventory of publicly and privately-owned businesses.

SSW Utility, Community Planning & Development Due no later than August 1, 2022

SSW Utility, Community Planning & Development August 1, 2022

SSW Utility

SSW Utility, Community

Planning & Development

Due no later than January 1, 2023

Due no later than

January 1, 2023

Table 8 – 2021 Source Control Program for Existing Development

Coordination

Permit Requirements

Permit section S5.A.5 requires that there is coordination between permittees, as well as within departments within the City, in order to eliminate barriers to compliance with the terms of the Permit.

- Develop coordination mechanisms to clarify roles and responsibilities for the control of pollutants between physically interconnected MS4s.
- Coordinate stormwater management activities for shared water bodies among permittees to avoid conflicting plans, policies and regulations.
- Develop a written description of internal coordination mechanisms among departments, to eliminate barriers to compliance with permit terms.

Current Activities

Listed below are ongoing coordination activities:

Implement an inspection program for identified sites.

Implement a progressive enforcement policy.

- Public Works Water Resources performs a lead role in coordinating Permit and municipal stormwater-related activities among City departments. Most departments in the City are affected in some way by permit requirements.
- Olympia staff participate in a regional Stormwater Technical Advisory Committee (StormTAC) that includes staff from the other Phase II Permittee jurisdictions (Lacey, Tumwater, and Thurston County), as well as both local Phase II Secondary Permittees (Port of Olympia, Washington State Department of Enterprise Services DES) and LOTT wastewater alliance. StormTAC meets bi-monthly and discusses stormwater topics related to the Phase II Permit, as well as other watershed planning projects and studies. Participating jurisdictions rotate the responsibility of hosting these meetings on a yearly basis. Following the onset of COVID-19 these meetings were temporarily cancelled. Utility staff helped relaunch using a Zoom software platform. The City of Tumwater offered to take over responsibility for hosting in 2021.

Coordination activities planned for 2021 are listed in Table 6 below.

Table 9 – 2020 Coordination

| Action Item | Staff Involved | Schedule Notes |
|--|---|------------------------------|
| Continue to implement current coordination activities. | City staff, staff from adjacent Phase II Permit jurisdictions, LOTT | Ongoing |
| Continue to participate in StormTAC meetings with neighboring jurisdictions. | City staff, staff from adjacent Phase II Permit jurisdictions, secondary permittees, LOTT | Ongoing Bi-monthly meetings |
| Written description of internal coordination mechanisms. | SSW Utility | Submitted with Annual Report |

Compliance with Total Maximum Daily Load (TMDL) Requirements

Permit Requirements

Olympia has additional requirements that stem from the Henderson Inlet Watershed and Deschutes River, Percival Creek and Budd Inlet Tributaries TMDLs (Appendix 2).

- Areas discharging to Henderson Inlet via the MS4, require phosphorus control for new and redevelopment projects that discharge via MS4 to Woodard Creek and meet the project thresholds in Appendix 1.
- Revise the City's coordinated plan with the City of Lacey to monitor and reduce fecal coliform bacteria discharges from the Fones/Taylor wetland treatment facilities.
 - Submit a revised program plan to Ecology that includes a timeline for implementation, sampling frequencies, and identifies at the minimum, who will be responsible for sampling, investigations and enforcement.
 - o If sampling results indicate potential illicit discharge, conduct an investigation in accordance with S5.C.5 of the Permit.
 - Submit a summary of the coordinated efforts with sampling, investigation and enforcement actions taken with each annual report.
- In all areas regulated under the City of Olympia's municipal stormwater permit and discharging to water bodies listed within the specific requirement on the TMDL section, annually report on temperature reduction measures in the watershed.

Current Activities

Current activities for the Henderson and Deschutes TMDL:

- Development and redevelopment projects that are located within city limits, and discharge via MS4 to Woodard Creek and meet the project thresholds in Appendix 1, are required to include phosphorus control in the stormwater design of their project.
- Staff revised the coordinated sampling plan with City of Lacey and submitted the update on January 2, 2020.
- Annually report on temperature-reduction measures in the Deschutes River watershed where TMDL requirements apply.

In 2021, the following additional Henderson TMDL related activities are planned and listed in Table 10 below.

Table 10 - 2020 Total Maximum Daily Load

| Action Item | Staff Involved | Schedule Notes |
|--|----------------|---------------------------------|
| Draft summary of coordinated sampling | SSW Utility | Attach summary to annual report |
| activities for annual report. | | each year |
| Annually report on temperature reduction | SSW Utility | Attach summary to annual report |
| measures in Deschutes River watershed | | each year |
| where TMDL requirements apply. | | |

Monitoring and Assessment

Permit Requirements

Section S8 of the Permit outlines requirements for monitoring and assessment.

- Continue to make annual payments into the collective Stormwater Action Monitoring (SAM) fund, to implement regional receiving water status and trends monitoring and effectiveness and source identification studies.
- Provide information as requested for effectiveness and source identification studies that
 are under contract with Ecology as active SAM projects. Requests will be limited to records
 of SWMP activities and associated data tracked and/or maintained in accordance with
 reporting requirements.

Current Activities

Current activities to meet monitoring and assessment needs include:

- The City of Olympia meets Permit requirements by funding SAM in the areas of status and trends monitoring, effectiveness studies and source identification monitoring.
- The City submitted notification to Ecology acknowledging the decision to make payments into the collective fund for both status and trends monitoring, and effectiveness and source identification studies during the 2019-2024 permit cycle.
- Other stormwater monitoring or studies will be undertaken periodically in association with TMDL requirements and as otherwise needed.

Planned Activities

Table 11 below lists the monitoring or assessment activities planned for 2021.

Table 11 – 2020 Monitoring and Assessment

| Action Item | Staff Involved | Schedule Notes |
|---|--|---|
| Continue funding SAM for Puget Sound monitoring activities. | SSW Utility | Payment of \$23,670 is due annually, on August 15 th . |
| Contract with Thurston County Environmental Health Department to conduct monthly sampling on Percival, Chambers, and Moxlie Creeks. | SSW Utility and Thurston County Environmental Health | Not required by the Permit, but sampling of local creeks has been an ongoing activity of the SSW Utility for over a decade. |
| Provide information as requested for effectiveness and source identification studies. | SSW Utility | A maximum of three requests during the permit term from SAM coordinator. 90 days to provide requested information. |

Glossary

AKART means all known, available, and reasonable methods of prevention, control and treatment. See also State Water Pollution Control Act, chapter 90.48.010 RCW and chapter 90.48.520 RCW.

All known, available and reasonable methods of prevention, control and treatment refers to the State Water Pollution Control Act, chapter 90.48.010 RCW and chapter 90.48.520 RCW.

Best Management Practices are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by Ecology that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

BIG means Business Inspection Group

BMP means Best Management Practice.

Business Inspection Group is a regional business inspection group that meets via Web-Ex to share information and collaborate on topics surrounding source control business inspections and new permit requirements.

IDDE means Illicit Discharge Detection and Elimination

Illicit discharge means any discharge to a MS4 that is not composed entirely of stormwater or of non-stormwater discharges allowed as specified in this permit (S5.C.3 and S6.D.3).

Illicit Discharge Detection and Elimination is an ongoing program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into the MS4.

Maximum Extent Practicable refers to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: "Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants."

MEP means Maximum Extent Practicable.

MS4 means municipal separate storm sewer system.

Municipal Separate Storm Sewer System means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains):

- (i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of Washington State.
- (ii) Designed or used for collecting or conveying stormwater.
- (iii) Which is not a combined sewer;

- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.; and
- (v) Which is defined as "large" or "medium" or "small" or otherwise designated by Ecology pursuant to 40 CFR 122.26.

SAM mean Stormwater Action Monitoring

Stormwater Action Monitoring is a collaborative, Western Washington regional stormwater monitoring program that is funded by more than 90 cities and counties, the ports of Seattle and Tacoma, and the Washington State Department of Transportation under the general municipal stormwater permits.

Stormwater Management Action Plan is the document required by Ecology to assess and complete a receiving water assessment and prioritization of at least one priority catchment area located within the City's jurisdiction.

Stormwater Management Program means a set of actions and activities designed to reduce the discharge of pollutants from the MS4 to the MEP and to protect water quality, and comprising the components listed in S5 (for cities, towns, and counties) or S6 (for Secondary Permittees) of this Permit and any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7 *Compliance with TMDL Requirements,* and S8 *Monitoring and Assessment*.

Stormwater Work Group prioritizes and selects stormwater-related studies and monitoring activities and oversees SAM.

SWG means Stormwater Work Group

SWMP means Stormwater Management Program.

TMDL means Total Maximum Daily Load.

Total Maximum Daily Load means a water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation must also account for seasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The Clean Water Act, section 303, establishes the water quality standards and TMDL programs.