

2023 STORMWATER MANAGEMENT PROGRAM PLAN

City of Auburn, WA March 2023



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INTRODUCTION

OVERVIEW

This document presents the City of Auburn's Stormwater Management Program (SWMP) Plan. Preparation and maintenance of this SWMP Plan is required by the Washington State Department of Ecology (Ecology) as a condition of the Western Washington Phase II Municipal Stormwater Permit (Permit). The Permit covers stormwater discharges from regulated small municipal separate storm sewer systems (MS4s).

The SWMP Plan is intended to inform the public of the planned SWMP activities for the upcoming year. The City of Auburn SWMP Plan will be applied to areas of the City served by the MS4 and to areas served by Underground Injection Control (UIC) wells.

The permit to discharge stormwater is designed to reduce the discharge of pollutants, protect water quality, and meet the requirements of the federal Clean Water Act.

REGULATORY BACKGROUND

The National Pollutant Discharge Elimination System (NPDES) permit program is a requirement of the federal Clean Water Act, which is intended to protect and restore waters for "fishable, swimmable" uses. The federal Environmental Protection Agency (EPA) has delegated permit authority to state environmental agencies, and these agencies can set permit conditions in accordance with, and in addition to, the minimum federal requirements. In Washington, the NPDES-delegated permit authority is the Washington State Department of Ecology (Ecology).

Auburn must comply with the Phase II Municipal Stormwater Permit. Ecology's Phase II Municipal Stormwater Permit is available on Ecology's website at:

https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Municipal-stormwater-general-permits/Western-Washington-Phase-II-Municipal-Stormwat-(1)

The Permit allows municipalities to discharge stormwater runoff from municipal drainage systems into the state's water bodies (e.g., streams, rivers, lakes, wetlands, and aquifers) as long as municipalities implement programs to protect water quality by reducing the discharge of "non-point source" pollutants to the "maximum extent practicable" (MEP) through application of Permit-specified components.

Ecology also administers the Underground Injection Control Program rule, Chapter 173-218 WAC statewide to protect groundwater by regulating the discharge of fluids from UIC injection wells. The UIC program — authorized by the Safe Drinking Water Act — is administered under <u>Title 40 Code of Federal Regulations (CFR)</u>. All injection wells must receive authorization in order to operate. UIC wells that overflow into the MS4 are regulated as part of the MS4 under the City's NPDES Permit. UIC wells that infiltrate all

stormwater that they receive are regulated under the UIC Program. Municipalities may use the presumptive approach (described in SWMMWW I-4.8) by applying the SWMP to the areas served by their municipal UIC wells.

The components specified in the Permit are collectively referred to as the Stormwater Management Program (SWMP) and are identified as follows:

S5.C.1	Stormwater Planning
S5.C.2	Public Education and Outreach
S5.C.3	Public Involvement and Participation
S5.C.4	MS4 Mapping and Documentation
S5.C.5	Illicit Discharge Detection and Elimination
S5.C.6	Controlling Runoff from New Development, Redevelopment, and Construction
	Sites
S5.C.7	Operations and Maintenance
S5.C.8	Source Control Program for Existing Development
<u>S7</u>	Compliance with Total Maximum Daily Load requirements
<u>S8</u>	Monitoring and Assessment

Specific Permit requirements are identified in this document using the Permit's citation methodology (e.g., S5.C.1.b).

The Permit issued by Ecology became effective on August 1, 2019 and will expire on July 31, 2024. The Permit requires the City to submit an annual report no later than March 31st of each year that details the actions taken in the previous year to implement the SWMP. The Permit also requires submittal of a SWMP Plan (this document) which describes the municipality's proposed SWMP activities for the current calendar year to comply with each of the permit requirements.

SWMP IMPLEMENTATION RESPONSIBILITIES

The Utilities Engineering Division in the Public Works Department coordinates the overall administration of efforts to comply with Permit requirements. Utilities will document the activities involved in the 2023 SWMP Plan that are implemented by other City Departments, including the Maintenance and Operations (M&O) Division of the Public Works Department, Community Development Department (CD), Parks, Arts and Recreation Department, and the Facilities Division of the Administration Department.

STORMWATER PLANNING

The objective of stormwater planning is to ensure the City considers stormwater management and water quality improvements as part of the City's long-range planning efforts including applicable code and design standard updates. The following table outlines Stormwater Planning activities that are planned to occur during the 2023 calendar year.

TABLE 1 – STORMWATER PLANNING WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
S5.C.1.b Coordinate with long-range plan updates	The inter-disciplinary team is incorporating stormwater management into the comprehensive planning process for completion in 2024.	Ongoing
S5.C.1.c Continue to integrate low impact coderelated requirements	Any new codes, rules, standards, or enforceable documents will include LID principles as necessary.	Ongoing
S5.C.1.d Develop a Stormwater Management Action Plan (SMAP)	Complete the development of the SMAP for the Olsen Creek catchment area.	SMAP due March 31, 2023

PUBLIC EDUCATION AND OUTREACH

The objective of public education and outreach is to build general awareness about methods to address and reduce impacts from stormwater runoff, effect behavior change to reduce or eliminate behaviors that cause or contribute to adverse stormwater impacts, and to encourage community engagement in stewardship activities. The following table outlines Public Education and Outreach activities that are planned to occur during the 2023 calendar year.

TABLE 2 – PUBLIC EDUCATION AND OUTREACH WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
S5.C.2.a.i Build general awareness about methods to address and reduce impacts from stormwater runoff.	Activities that we are participating in include: (1) Puget Sound Starts Here • regional bus ad campaign to promote awareness of stormwater's impact on receiving waters to the general public • A digital pollution prevention ad campaign targeting adults • Providing links to Puget Sound Starts Here on the Storm Drainage Utility web page and advertised local stewardship activities on the PSSH calendar (2) Classroom environmental education programs in partnership with the non-profit organization, Nature Vision.	Ongoing
S5.C.2.a.ii Using social marketing practices and methods, effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.	In 2023 we will continue to partner in the Dumpster Outreach Group social marketing program. We are placing stickers on dumpsters throughout the city to remind users to close the lid. We will be expanding the proven outreach effort to more businesses through the new Source Control inspection program.	Ongoing
S5.C.2.a.iii Provide and advertise stewardship opportunities and/or partner with existing organizations to encourage community engagement in addressing impacts to stormwater runoff and receiving waters.	The Storm Drainage Utility web page provides links to the websites of organizations that offer stewardship opportunities in the local Puget Sound area.	Ongoing

PUBLIC INVOLVEMENT AND PARTICIPATION

The objective of public involvement and participation is to provide opportunities for participation by the public in efforts related to environmental and/or stormwater management program development. The following table outlines Public Involvement and Participation activities that are planned to occur during the 2023 calendar year

TABLE 3 - PUBLIC INVOLVEMENT AND PARTICIPATION WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
S5.C.3.a Create opportunities for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation and update of the SMAP and SWMP.	The Utilities Engineering Division will post the SWMP Plan and Annual Report on the Storm Drainage Utility web page, and accepts comments and suggestions on them year round. The SMAP will have an interactive web site where the public can learn about the SMAP process and provide comments.	Ongoing
S5.C.3.b Make the SWMP Plan and Annual Report available to the public by posting on the City's website. Make any other documents required to be submitted to Ecology in response to Permit conditions available to the public.	The Utilities Engineering Division will post the Annual Report and current year's SWMP Plan on the Storm Drainage Utility web page. Any other required submittals will be publicly available through the same utility web page.	posted by May 31, 2023.

MS4 MAPPING AND DOCUMENTATION

The objectives of mapping and documentation are to ensure that municipal separate storm sewer systems (MS4s) are mapped accurately, consistently, and utilizing modern methods for data acquisition and presentation across permitted jurisdictions in Washington. The following table outlines MS4 Mapping and Documentation activities that are planned to occur during the 2023 calendar year.

TABLE 4 – MS4 MAPPING AND DOCUMENTATION WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
S5.C.4.a Ongoing mapping of features i-vii.	Any newly discovered connections or further details of existing MS4 components will be added to the database as needed.	Ongoing
S5.C.4.d & e Make maps available to Ecology, federally recognized Indian Tribes, municipalities and other Permittees upon request.	If any data is requested, it will be made available.	Ongoing

ILLICIT DISCHARGE DETECTION AND ELIMINATION

The objective of the illicit discharge detection and elimination is to ensure that the City has a programmatic response aimed at detecting and removing discharges that contribute to stormwater pollution. The following table outlines Illicit Discharge Detection and Elimination activities that are planned to occur during the 2023 calendar year.

TABLE 5 – ILLICIT DISCHARGE DETECTION AND ELIMINATION WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
S5.C.5.b Inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.	Information regarding stormwater pollution prevention and proper waste disposal is provided on the City's Utility web pages. During routine inspections City storm drainage inspectors will educate business owners about pollution source control and private storm system operation and maintenance.	Ongoing
S5.C.5.d.i.(a) Conduct IDDE field screening of at least 12% of the MS4 annually.	The City will inspect at least 50% of MS4 this year. Inspections will include IDDE screening on catch basins, public storm facilities, and private systems.	Ongoing inspections
S5.C.5.d.iii Provide an ongoing identification and reporting training program for all municipal field staff, who as a part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge and/or illicit connection to the MS4.	The City Human Resources Department will provide IDDE training to newly hired staff that have positions that work in the field Including maintenance staff, inspectors, project and plan review engineers, and police patrol officers.	Ongoing
S5.C.5.f Train staff on proper IDDE response SOPs and train municipal field staff to recognize and report illicit discharges.	Training is being done and recorded as needed.	Ongoing

Permit Requirement	Planned Activity	Compliance Timeframe
S5.C.5.g Recordkeeping including tracking and	The City will use the WQWebIDDE portal to report illicit discharge incidents.	Ongoing
maintaining records of the activities conducted to meet the requirements of this section of the Permit.	The City's asset management software program Cartegraph will be used to track IDDE responses and MS4 maintenance inspections.	
	The City will use NPDESPro inspection software to track private storm drainage system inspections.	

CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES

The objectives of the controlling runoff from new development, redevelopment, and construction sites are to reduce pollutants in stormwater during and after development occurs. The following table outlines Controlling Runoff activities that are planned to occur during the 2023 calendar year.

TABLE 6 – CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
S5.C.6.e Provide training to staff on the new codes, standards, and SOPs and create public education and outreach materials.	If new codes are developed, staff will be trained on their implementation.	1 month from approval

OPERATIONS AND MAINTENANCE

The objectives of operations and maintenance are to prevent or reduce pollution from municipal operation and maintenance activities that could negatively impact stormwater. The following table outlines Operations and Maintenance activities that are planned to occur during the 2023 calendar year:

TABLE 7 – OPERATIONS AND MAINTENANCE WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
S5.C.7.b Conduct annual inspections of all permitted private stormwater treatment and flow control facilities. Enforce maintenance as triggered by the maintenance standards.	Facility inspections will be performed by utility staff throughout the year. Maintenance requirements will be enforced as triggered by the maintenance standards.	Ongoing inspections Maintenance compliance within 6-months
S5.C.7.c Conduct annual inspection of all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities and perform maintenance as needed to comply with maintenance standards.	Facility inspections will be performed by utility staff and maintenance will be carried out as needed.	Ongoing inspections Maintenance compliance within 120 days
S5.C.7.c.ii Check treatment and flow control facilities after major storms and perform repairs as needed in accordance with adopted maintenance standards.	Inspections will be performed after major storm events.	Ongoing inspections
S5.C.7.c.iii Inspect all catch basins and inlets owned or operated by the City at least once every two years. Clean the catch basins if inspections indicate cleaning is needed to comply with maintenance standards.	Catch basins inspections will be performed by utility staff, and maintenance will be carried out as needed.	Ongoing inspections Maintenance compliance within 60 days

Permit Requirement	Planned Activity	Compliance Timeframe
S5.C.7.e Implement an ongoing training program for employees of the City whose primary construction, operations, or maintenance job functions may impact stormwater quality. Document and maintain records of the training provided.	Documentation will be recorded of any training sessions held in 2023.	Ongoing
S5.C.7.g Maintain records and summarize annual activities for the Annual Report.	The annual report will summarize activities for the year.	December 2023

SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT

The objective of the source control program for existing development is to prevent and reduce pollutants in runoff from areas that discharge to the MS4. The following table outlines Source Control Program activities that are planned to occur during the 2023 calendar year.

TABLE 8 – SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
S5.C.8.a Implement a program to prevent and reduce pollutants in runoff from areas that discharge to the MS4.	Storm Drainage Engineering staff will perform inspections and work with property owners to improve source control.	Ongoing inspections
S5.C.8.b.iii Inspect pollutant 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 beginning January 1, 2023.	The Utilities Engineering Division began source control inspections January 1, 2023 and has plans to conduct them throughout the year	Ongoing inspections

COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

The federal Clean Water Act requires that Ecology establish "Total Maximum Daily Loads" (TMDL) for rivers, streams, lakes, and marine waters that don't meet water quality standards. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards. After the TMDL has been calculated for a given water body, Ecology determines how much each source must reduce its discharges of the pollutant in order bring the water body back into compliance with the water quality standards. TMDL requirements are included in the stormwater NPDES permits for discharges into affected water bodies.

Stormwater discharges covered under this Permit are required to implement actions necessary to achieve the pollutant reductions called for in applicable TMDLs. Applicable TMDLs are those approved by the EPA before the issuance date of the Permit or which have been approved by the EPA prior to the issue date of the Permit or the date Ecology issues coverage under the Permit, whichever is later. Information on Ecology's TMDL program is available on Ecology's website at https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process.

In accordance with Permit condition S7 Compliance with Total Maximum Daily Load Requirements the City must comply with the following TMDL:

Name of TMDL	Puyallup Watershed Water Quality Improvement Project
Document(s) for TMDL	Puyallup River Watershed Fecal Coliform Total Maximum Daily Load – Water Quality Improvement Report and Implementation Plan, June 2011, Ecology Publication No. 11-10-040. https://fortress.wa.gov/ecy/publications/SummaryPages/1110040.html
Location of Original 303(d) Listings	Puyallup River 16712, 7498, White River 16711, 16708, 16709, Clear Creek 7501, Swan Creek 7514, Boise Creek 16706
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittee's municipal stormwater permit and discharging to water bodies listed within the specific requirement in this TMDL section.
Parameter	Fecal Coliform
EPA Approval Date	September 2011
MS4 Permittee	Phase I Permit: King County, Pierce County Phase II Permit: Auburn, Edgewood, Enumclaw, Puyallup, Sumner

The following table outlines Compliance with TMDL requirement activities that are planned to occur during the 2023 calendar year:

TABLE 9 – COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
Complete IDDE screening for bacteria sources in the TMDL basin.	IDDE inspections will be conducted as part of routine MS4 inspection activities.	Ongoing inspections
Install and maintain pet waste education and collection stations at municipal parks and other Permittee owned and operated lands adjacent to streams. Focus on locations where people commonly walk their dogs.	The Parks Department will maintain pet waste education and collection stations at municipal parks and other public lands adjacent to the White River and its tributaries. The Storm Drainage Utility will provide pet waste station supplies for the stations in City parks.	Ongoing

MONITORING AND ASSESSMENT

The objective of monitoring and assessment is to evaluate the effectiveness of municipal stormwater permit implementation through status and trends monitoring, and effectiveness and source identification studies. Municipalities may opt to pay annually into a collective fund that is used regionally to perform this research rather than performing the research individually. The following table outlines Water Quality Monitoring activities that are planned to occur during the 2023 calendar year:

TABLE 10 – WATER QUALITY MONITORING WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
Status and Trends Monitoring and Effectiveness and Source ID studies.	The Storm Drainage Utility will pay \$36,928.00 into the SAM collective fund for implementation of Status and Trends Monitoring, and Effectiveness and Source Identification Studies.	August 15
S8.A.3 Provide information as requested for effectiveness and source control studies.	The Storm Drainage Utility will submit information as requested for effectiveness and source identification studies that are under contract with Ecology as active Stormwater Action Monitoring (SAM) projects.	Ongoing

COMPLIANCE WITH UNDERGROUND INJECTION CONTROL WELL (UIC) PROGRAM REQUIREMENTS

The UIC Program rule (Chapter 173-218 WAC) is the regulatory authority for underground injection control wells in Washington. This section describes the requirements of the UIC well program.

All injection wells must either receive a program rule authorization or a state discharge permit in order to operate. To use the "presumptive approach" (that the well does not endanger groundwater quality) to meet UIC program rule authorization for municipal Class V UIC wells, jurisdictions may apply the Stormwater Management Program (SWMP) that complies with their MS4 Permit to the areas served by their municipal UIC wells.

The requirements include:

- Register all UIC wells, existing (in use before 2/3/2006) and new (constructed after 2/3/2006), with Ecology.
- Complete well assessments for all existing wells in use prior to 2/3/2006.
- Site, design, construct, operate, and maintain new UIC wells according to the specifications throughout the 2019 Stormwater Management Manual for Western Washington (SWMMWW) Section I-4 Underground Injection Wells.
- Fulfill source control and O&M requirements for both new and existing UIC wells by:
 - O&M according to the specifications of SWMMWW Section I-4.
 - Source control activities(including targeted education and outreach) that are well-suited for land uses associated with the UIC wells and to the specifications in the SWMMWW.
- Provide illicit discharge detection and elimination (IDDE) programs in areas served by the UIC wells to reduce pet waste and other pathogens.

The following table outlines Underground Injection Control activities that are planned to occur during the 2023 calendar year:

TABLE 11 – UNDERGROUND INJECTION CONTROL WORK PLAN

Permit Requirement	Planned Activity	Compliance Timeframe
Apply the SWMP to areas served by UICs to comply with the presumptive approach to UIC program rule authorization.	All areas of the city are part of the SWMP plan including those served by drywells and all of those basins will be subject to the same regulations, inspection, and maintenance activities identified throughout this document.	Ongoing
Site, design, and construct new UIC wells according to the specifications in SWMMWW Section I-4.	Design and construction will be held to the applicable standards.	Ongoing
Operate, and maintain UIC wells according to the specifications throughout the SWMMWW Section I-4.	Continue to maintain facilities to enhance water quality and meet UIC program requirements.	Ongoing