



2023 Stormwater Management Program (SWMP) Plan



**City of Burien
Department of Public Works
400 SW 152nd St., Suite 300
Burien, WA 98166
March 24, 2022**

Table of Contents

Introduction	4
Discussion.....	5
Permit Coordination Efforts.....	6
Stormwater Planning (S5.C.1).....	7
Permit Requirements.....	7
Current and Planned Activities for 2022.....	7
Stormwater Management Action Plan (SMAP) development.....	7
Coordination with Long-Range Plan updates	8
Public Education and Outreach (S5.C.2)	9
Permit Requirements.....	9
Current and Planned Activities for 2023.....	9
Behavior Change	11
Stewardship opportunities.....	12
Public Involvement and Participation (S5.C.3).....	13
Permit Requirements.....	13
Current and Planned Activities for 2023.....	13
MS4 Mapping and Documentation (S5.C.4)	14
Permit Requirements.....	14
Current and Planned Activities for 2023.....	14
Mapping MS4 outfall attributes.....	14
Mapping private connections to the MS4	14
Maintaining all mapping data electronically.....	14
Illicit Discharge Detection and Elimination (S5.C.5).....	15
Permit Requirements.....	15
Current and Planned Activities for 2023.....	15
IDDE program Regulatory and Operational details	15
IDDE Field Screening Program	16
Public outreach regarding illicit discharges and proper waste disposal.....	16
Controlling Runoff From Development and Construction (S5.C.6)	17

Permit Requirements	17
Current and Planned Activities for 2023.....	17
Development related Regulatory activities	17
Engineering Plan review activities	18
Construction inspection activities.....	18
Operations and Maintenance (S5.C.7).....	19
Permit Requirements	19
Current and Planned Activities for 2023.....	19
Regulatory and Enforcement Activities	19
Stormwater Facility Inspection Program	20
Private Stormwater Facility Inspections	20
City-Owned Stormwater Facility Inspections.....	20
Catch Basin Inspections	20
Stormwater Pollution Prevention Plan (SWPPP) for City-operated facilities	20
Policies and Procedures to reduce stormwater impacts (BMP plan for City Operations).....	21
Source Control Program for Existing Development (S5.C.8).....	22
Permit Requirements	22
Current and Planned Activities for 2023.....	22
Monitoring and Assessment (S8)	24
Permit Requirements	24
Current and Planned Activities for 2023.....	24
Appendix A.....	25
2019 - 2023 IDDE Program Field Screening Efforts.....	25

Introduction

This Stormwater Management Program (SWMP) Plan is required by the Western Washington Phase II NPDES Municipal Stormwater Permit (Permit). The current Permit was issued by the State Department of Ecology (Ecology) to the City of Burien (City) and became effective on August 1, 2019. It provides general guidelines, procedures, and regulations to support an effort to preserve, protect, and improve the State's water resources. This Permit is intended to reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation. Permit and SWMP related components are intended to support these goals and are required to be implemented by the specific dates provided in the permit. The current permit expires on July 31, 2024.

This document will be updated annually to reflect those items that have been implemented during the previous year in response to permit target dates. The SWMP should be viewed as a "working draft" as it appears here and in later annual updates. As required, by May 31st of each year, the updated document will be available for review and comment on the City of Burien Stormwater website. This SWMP is available on the City's website at <http://www.burienwa.gov/swmp>.

Questions, suggestions, and comments on the National Pollution Discharge Elimination System (NPDES) permit or SWMP development can be directed to Stormwater Engineer Dan O'Brien at (206) 248-5521 or stormwater@burienwa.gov.

Discussion

The 2019-2024 Permit identifies nine major components of the SWMP:

1. Comprehensive Stormwater Planning (S5.C.1)
2. Public Education and Outreach (S5.C.2)
3. Public Involvement and Participation. (S5.C.3)
4. MS4 Mapping and Documentation (S5.C.4)
5. Illicit Discharge Detection/Elimination. (S5.C.5)
6. Controlling Runoff from New Development, Redevelopment and Construction Sites. (S5.C.6)
7. Operations and Maintenance. (S5.C.7)
8. Source Control Program for Existing Development. (S5.C.8)
9. Monitoring and Assessment (S8)

A general description of these components followed by a detailed listing of related requirements and current City activities are provided on the following pages. The City of Burien is responsible for implementing Permit requirements by the specified target dates and updating the SWMP to reflect this implementation. Current component and item statuses are briefly addressed with notes generally following the appropriate requirement listings. This document constitutes the City of Burien's SWMP and will be revised and formalized as Plan implementation progresses.

Permit Coordination Efforts

Internally, the Public Works department coordinates the implementation of Burien's 2023 SWMP Plan. The City of Burien also coordinates efforts with regional groups to control pollutants between interconnected MS4's and meet permit requirements.

Among permittees:

- Regional Permit Coordinators (Phase I and Phase II jurisdictions)
- Stormwater Outreach for Regional Municipalities (STORM)
 - The City's Sustainability Manager is a STORM steering committee member
- Business Inspection Group (BIG)
- Regional Operations and Maintenance Program (ROADMAP)
- Miller/Walker Creeks Stewardship Program (King County, City of Burien, City of Normandy Park, City of SeaTac, Port of Seattle)
- WRIA 9 (Water Resource Inventory Area) Stakeholder Watershed Planning (17 different participating jurisdictions)
- APWA (WA chapter) Stormwater group

Stormwater Planning (S5.C.1)

This section describes the permit requirements, current City activities, and planned actions regarding the Comprehensive Stormwater Planning section of the 2019-2024 Permit (Section S5.C.1). This section will outline upcoming implementation deadlines required by the current Permit.

Permit Requirements

- Implement a Comprehensive Stormwater Planning program to inform and assist in the development of policies and strategies as a water quality management tools to protect aquatic resources.
- On or before March 31, 2021, the Permittee shall describe how water quality and watershed protection were addressed during the 2013-2019 Permit cycle in updates to the Comprehensive Plan (or equivalent) and in other locally initiated or state- mandated long-range land use plans that are used to accommodate growth, or transportation.
- On or before January 1, 2023, the Permittee shall submit a report describing how water quality and watershed protection are being addressed during this permit cycle in updates to the Comprehensive Plan (or equivalent) and in other locally initiated or state-mandated long-range land use plans that are used to accommodate growth, or transportation.
- Permittees shall 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.
- Begin a Stormwater Management Action Planning process, including a receiving water basin assessment (due March 31, 2022), receiving water basin prioritization (due June 30, 2022), and development of a Stormwater Management Action Plan (SMAP) for at least one high priority area (due March 31, 2023), in accordance with Permit requirements.

Current and Planned Activities for 2023

Stormwater Management Action Plan (SMAP) development

The SMAP is a process to identify receiving waters and watersheds (basins) within the City, analyze them to determine which basins 1) have the most degraded water quality and habitat, and thus are in the highest need of improvements and 2) would benefit most from structural or operational improvements (i.e. retrofit projects or improved maintenance practices), and prepare a planning document for one or more catchment areas (subbasins) within a basin outlining these potential improvements.

Beginning in 2021, and continuing through 2023, the City began work on the following items for the SMAP:

- In 2021, Burien was awarded a Dept. of Ecology Stormwater Financial Assistance Program grant for development of the SMAP. The grant requirements include more robust public outreach efforts Stormwater Management Action development in the final document.
- In late 2021, Burien began work on the SMAP process through a third party consultant, and as of early 2022, is expeditiously working to complete the receiving water basin assessment prior to the March 31, 2022, deadline.

- Tasks completed in 2022:
 - Development of a public outreach plan and Stakeholder Involvement plan
 - Implemented three public outreach efforts, during the basin assessment, basin prioritization, and SMAP plan development phases, respectively
- Tasks to be completed by March 31, 2023:
 - Finalization of Stormwater Actions and SMAP document
- Tasks continuing beyond March 31, 2023:
 - Further refinement of SMAP document and Stormwater Actions to reflect Dept. of Ecology grant review comments and suggestions

Coordination with Long-Range Plan updates

In order to meet the January 1, 2023 permit requirement, Burien Public Works staff has begun discussions with City Planning staff to coordinate on information needs to help inform future long-term planning documents. In 2022, staff met with representatives of other City departments and reviewed existing and in-progress draft Planning documents to coordinate on long-term planning with regards to stormwater management.

Public Education and Outreach (S5.C.2)

The City of Burien has a long-standing Public Education and Outreach program that is uniquely designed for our community. The City uses a variety of approaches to inform residents and businesses about stormwater pollution prevention and considers public education and outreach an important part of protecting our local water resources.

Permit Requirements

- Provide an education and outreach program for the area served by the MS4.
- Build general awareness about methods to address and reduce impacts from stormwater runoff.
- Effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.
- Create stewardship opportunities that encourages community engagement in addressing the impacts from stormwater runoff.

Current and Planned Activities for 2023

The City has several programs in place to help residents and businesses understand and help mitigate stormwater pollution. Table 1 (below) lists both current and planned education and outreach programs for 2023.

Burien is an active participant in regional groups surrounding behavior change and general awareness programs, including:

- **Stormwater Outreach Group for Regional Municipalities (STORM):** Burien has been a member of STORM for many years. From 2021-2023, Burien was a member of the STORM steering committee.
- **Dumpster Outreach Group (DOG):** Burien is a core Planning Team member of the behavior change campaign around dumpster management.

Table 1: General Awareness Efforts

Item	Target Audience	Description	Subject Area
StormFest*	General public (including overburdened communities, or school aged children)	StormFest is an annual, three-day, field-based stormwater learning event that engages all 6th grade students in the Highline School District (HSD) using best practices for environmental education and equity. At StormFest, students learn about their local watershed, sources of pollution, and engineering solutions to prevent stormwater pollution. In 2023, StormFest will be coming back to schools as a field trip. The StormFest committee, comprised of jurisdictions in the HSD and other local partners, will plan and host StormFest at the Des Moines Beach Park in June 2023. The classroom component of the event will be supported by 2021 work completed by the committee, including the development of three videos featuring local environmental professionals	General impacts of stormwater on surface waters, including impacts from impervious surfaces; Low impacts development (LID) principles and LID BMP's.
City Website	General public; Businesses	Description of stormwater related information, including how to prevent stormwater pollution as a resident or business, development regulations, what is allowed in the stormwater system, and how to report illegal spills or dumping.	General impacts of stormwater on surface waters, including impacts from impervious surfaces
City Social Media	General public; Businesses	The City continues to use their social media channels to distribute information around stormwater impacts and ways residents and businesses can prevent pollution from entering the waterway.	General impacts of stormwater on surface waters, including impacts from impervious surfaces
Recycling Events	General public; Businesses	The City will host two recycling events in 2023, where recycle content rain barrels and compost/worm bins will be sold. Educational materials for stormwater management, natural yard care, and green-clean literature will be distributed at each event.	General impacts of stormwater on surface waters, including impacts from impervious surfaces
Car Wash Program	General public	Continue the promotion of the Burien Car wash program, which includes providing car wash kits to local groups to use for fundraising events, or for	General impacts of stormwater on surface waters, including impacts

		residents for home use, free of charge. This program includes a pre site visit to ensure proper use of the car wash kit and to decrease barriers for compliance.	from impervious surfaces
Puget Sound Starts Here (PSSH) Month	General public; Businesses	PSSH month raises awareness of how our everyday actions impact waterways in the Puget Sound region and what we can do to prevent pollution. Burien plans to participate in the 2023 campaign.	General impacts of stormwater on surface waters, including impacts from impervious surfaces
Miller-Walker Creek Basin Stewardship and Monitoring Coordination	General public	Working with the Basin Steward and Miller-Walker Committee on creek and watershed restoration and education. This includes community outreach, restoration parties, responding to resident requests and complaints, and long-term watershed planning.	General impacts of stormwater on surface waters, including impacts from impervious surfaces
Tide Pools for Tots	General public	In partnership with the Environmental Science Center, host the Tide Pools for Tots event. The event is held to teach children and adults more about watersheds and safe beach explorations.	General impacts of stormwater on surface waters, including impacts from impervious surfaces
Public Beach Walks	General public	Host public beach walks. Public beach walks attendees can learn more about watershed and stormwater management during low tide beach walks.	General impacts of stormwater on surface waters, including impacts from impervious surfaces
Bird, Plant, and Owl Walks	General public	Host Bird & Plant walk and Owl walks in 2023. Community members can take a guided walk to identify birds and plants. Discussions will revolve around stormwater management, healthy watersheds, and the benefits of native plants.	General impacts of stormwater on surface waters, including impacts from impervious surfaces

**StormFest was made possible by an Ecology GROSS grant awarded to the City of Burien in 2018.*

Behavior Change

Burien is a core team member of the Dumpster Outreach Group (DOG). In 2020, the DOG developed a behavior change campaign focused on keeping dumpster lids shut to protect surface water quality. The target audience is commercial businesses. In 2021, Burien piloted the campaign with other Puget Sound jurisdictions. The pilot phased proved to be effective, with an increase of dumpster lid closures from 49% to 77%. In 2023, Burien will continue broad scale implementation of the campaign with other businesses.

Stewardship opportunities

The City will continue to offer stewardship opportunities for community members through a variety of programs. Table 2 lists opportunities for 2023.

Table 2: Stewardship Opportunities

Item	Description	Subject Area
Miller and Walker Creek Stewardship	Since 2007, the City has partnered with King County, SeaTac, Normandy Park, and the Port of Seattle as part of a watershed-scale stormwater planning team to improve watershed resources and foster community investment in the basin through volunteer opportunities. Three volunteer opportunities are planned for 2023, which include the planting of native trees and shrubs, invasive non-native plant removals, and cleaning up litter.	General impacts of stormwater on surface waters
Adopt-A-Drain	The Adopt-A-Drain Program is a volunteer-based opportunity for residents to help care for a storm drain near their residence. Volunteers are provided with instructions to care for a storm drain or multiple drains on their street or walking route. Tasks include monitoring and removing debris from the storm drain(s) approximately once a week during the storm season (especially during peak leaf-dropping season) and tracking debris collected. Burien plans to expand this program in 2023 to more neighborhoods.	General impacts of stormwater on surface waters
BirdFest	The City hosts an annual three-hour event at the Burien Community Center and a local park to encourage community science participation and best practices to protect local wildlife in our watershed. In 2023, the event will be at the Burien Community Center and participants will hear from local experts about bird watching and how to keep our natural environment clean for both wildlife and the community.	General impacts of stormwater on surface waters
Beach cleanups	The City hosts at least two beach cleanups at a park in Burien each year. At each event, participants collect trash, record it, and remove it from the beach. The cleanups include a discussion around the impact of debris in our waterways, and the ways in which litter impacts our water systems both locally and internationally.	General impacts of stormwater on surface waters
Community Salmon Investigation (CSI)	CSI is a community driven salmon monitoring program that provides annual data on the number of adult salmon that return to Miller and Walker creeks each year. The program also highlights how many Coho salmon are dying from polluted water before they have a chance to spawn. The CSI has collected salmon data since 2010 to help us learn more about the water quality in Miller creek. This program uses community volunteers to monitor the Miller and Walker creeks for salmon in the fall.	General impacts of stormwater on surface waters, including impacts from impervious surfaces

Public Involvement and Participation (S5.C.3)

This section describes the permit requirements, current City activities, and planned actions for providing opportunities for public involvement and participation in Stormwater Management Program (SWMP) Plan and Stormwater Action Plan (SMAP) development. All cities shall create opportunities for the public to participate in the decision-making processes involving the development, implementation and updating of the Permittee's SWMP. Each city shall develop and implement a process for consideration of public comments on their SWMP. The community is an important part of Burien's stormwater pollution prevention program.

Permit Requirements

- Create opportunities for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation, and update of the Permittee's SMAP and SWMP.
- Post on City website the City's SWMP Plan and the annual report, required under S9.A, no later than May 31 each year. All other submittals shall be available to the public upon request.

Current and Planned Activities for 2023

The City of Burien is committed to providing ongoing opportunities for public input into the development of the SWMP and SMAP Plans to improve local water quality. In 2023, the City plans to invite public input through:

- Social media advertisement
- City newsletter updates
- Burien magazine advertisements
- City website announcements
- Farmers market outreach
- Stewardship and volunteer events
- Community Hub. The community hub is a city platform for residents to provide input on the SWMP and SMAP, along with other city projects. Community members who sign up on the Community Hub would receive regular updates on projects they subscribe to.

The City will post the 2023 SWMP Plan on the City's website by May 31, 2023.

MS4 Mapping and Documentation (S5.C.4)

The Permittee's SWMP shall include an ongoing program for mapping and documenting the MS4.

Permit Requirements

- Maintain mapping data for the features listed in Section S5.C.4.a.
- By January 1, 2020, begin to map size and material for all known MS4 outfalls where no current data exists.
- By August 1, 2023, complete mapping of all known connections from the MS4 to privately owned stormwater systems.
- By August 1, 2021, maintain all mapping data electronically.

Current and Planned Activities for 2023

Mapping MS4 outfall attributes

In 2019, City staff began researching missing mapping data, including size and material for all known MS4 outfalls, and began adding outstanding data to the City's database as it is obtained, generally through IDDE field screening efforts and routing stormwater system inspections. This is expected to continue throughout 2023. After that, mapping data will continue to be reviewed and updated as needed.

Mapping private connections to the MS4

In 2021, City staff began updating its GIS database to provide fields for connections between the City's MS4 and privately owned stormwater systems. This work is expected to continue through the August 1, 2023, deadline.

Maintaining all mapping data electronically

The City of Burien has been utilizing ESRI ArcGIS software to store and maintain our Stormwater mapping electronically for many years. All new stormwater data is periodically added to the GIS database, as well as routine and nonroutine edits and revisions when discovered or needed.

Illicit Discharge Detection and Elimination (S5.C.5)

This section describes the permit requirements, current City activities, and planned actions related to Illicit Discharge Detection and Elimination (IDDE). The City shall continue to provide an ongoing program designed to prevent, detect, characterize, track and eliminate illicit connections and illicit discharges into the MS4.

Permit Requirements

- Implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the Permittee's MS4 to the maximum extent allowable under state and federal law.
- Implement procedures for reporting and correcting or removing illicit connections, spill and other illicit discharges when they are suspected or identified.
- Inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.
- Implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4. This program shall include field screening of an average of 12% of the MS4 each year.
- Document IDDE Field Screening Methodology in the Annual Report.
- Train staff that are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, and illicit connections (IC), to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements or staffing. Permittees shall document and maintain records of the training provided and the staff trained.
- Track and maintain records of the activities conducted to meet the requirements of this section.

Current and Planned Activities for 2023

IDDE program Regulatory and Operational details

- The City has adopted a SWM ordinance to address Illicit Connection (IC) and Illicit Discharge Detection and Elimination (IDDE). The ordinance includes a list of allowable and prohibited discharges to the City's drainage system or streams. This information can be found in Burien Municipal Code BMC 13.10.240.
- The City provides IC/IDDE training to City staff, as needed, on identification and reporting of illicit discharges. Follow up training is provided to City staff, as necessary, to address changes in procedures or requirements. In 2022, one staff attended an IDDE related training (CESCL recertification). Four staff members attended the Ecology-provided Source Control Inspection Program training. Additionally, several staff members were educated in proper IDDE reporting procedures, to ensure all IDDE and spill reports get investigated and reported according to required Permit timelines. In 2023, approximately twenty staff members will attend CESCL certification or recertification, along with one recently hired staff to complete the Source Control Inspection program training online. Additional IDDE training will be provided as needs and personnel dictate.

- The City performs field inspections when necessary and keeps records for all reported illicit discharges and connections, with technical assistance from King County and DOE when requested. In 2021, Burien began utilizing the online IDDE submission form in the Secure Access Washington (SAW) WQWebPortal and will continue to use that method of recordkeeping in the future.

IDDE Field Screening Program

Utilizing Ecology's 2020 Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual (IDDE Manual) as a procedural guide, the City has begun to implement a combination of Catch Basin/Manhole and Outfall inspections as its IDDE Field Screening Methodology. Inspections will begin at an outfall, and when signs of any current or past potential illicit discharge are present, inspections will progress upstream, following a "monitoring node approach", as described in Section 3 of the IDDE Manual, in which the inspection of a small drainage area is begun at an outfall, and each outfall or catch basin inspected will include up to 20 upstream catch basins, or an entire conveyance network, whichever is smaller. Each grouping of catch basins is considered a "node." Standard field screening techniques, based on the IDDE Manual, will be applied to these inspections. An electronic inspection form has been developed for the City's Cityworks Asset Management system and has been used for Field Screening inspections beginning in 2015. See Appendix A for more information on the City's efforts in this area for previous years, and planned actions for 2023.

Public outreach regarding illicit discharges and proper waste disposal

In order to inform the general public about illicit discharges, the City publicizes a hotline number for spills and illicit discharges on the City's website. This number is 206-241-4647. Also on the City's website is information on Allowable and Prohibited discharges, access to GIS maps of the City's stormwater system (MS4), as well as external resources for additional information.

Controlling Runoff From Development and Construction (S5.C.6)

This section describes the permit requirements, current activities, and planned actions related to controlling runoff from new development, redevelopment, and construction sites. As required by the previous Permit, the City must have adopted an ordinance or other enforceable mechanism no later than February 16, 2010. The program shall apply to private or public development, including roads.

Permit Requirements

- Implement and enforce a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities. The program shall apply to private and public development, including transportation projects. This program shall be effective no later than June 30, 2022.

The local program outlined above shall include:

- A permitting process with site plan review, inspection and enforcement capability to meet the standards listed in S5.C.6.c (i) through (iv), for both private and public projects, using qualified personnel. At a minimum, this program shall be applied to all sites that meet the minimum thresholds adopted pursuant to S5.C.6.b.i.
- The program shall make available, as applicable, a link to the electronic “Construction Stormwater General Permit Notice of Intent (NOI)” form for construction activity, and a link to the electronic “Industrial Stormwater General Permit NOI” form for industrial activity to representatives of proposed new development and redevelopment.
- Each Permittee shall ensure that all staff whose primary job duties fall within this section are trained to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

Current and Planned Activities for 2023

Development related Regulatory activities

On May 16, 2022, Burien City Council approved Ordinance 792, which adopted the 2021 King County Surface Water Design Manual (KCSWDM) and Stormwater Pollution Prevention Manual (SPPM), along with several additional code changes, to gain equivalency with Ecology’s updated 2019 Stormwater Management Manual for Western Washington (SWMMWW). This change maintains Burien’s equivalency with Ecology’s updated SWMMWW.

The City provides Certified Erosion and Sediment Control Lead (CESCL) training to all relevant City staff, on a three-year cycle to maintain current certification status. In 2022, one City staff member attended CESCL certification or recertification training. For 2023, approximately 20 staff are expected to be certified or recertified this year.

The City provides routine training to City staff responsible for implementing the program to control runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspection, and enforcement. In 2022, no City staff attended trainings on the above topics, beyond the CESCL training described previously. For 2023, staff will make an increased effort to identify relevant trainings for staff to attend in the above topics.

Engineering Plan review activities

Burien Public Works Engineering staff reviews all submitted Site Plans for compliance with Burien's adopted Surface Water Design Manual (SWDM). These reviews include determination of whether a Drainage Review is required, verification of compliance with the SWDM, and review of construction procedures such as Erosion and Sediment Control (ESC) plans. The City provides an ESC brochure for small project sites and a Small Project Drainage Requirements brochure, both of which are available when requested.

Construction inspection activities

The City conducts site inspections for new development and redevelopment projects that include land disturbing activities for proper installation and operation of ESC Best Management Practices (BMPs). Sites are inspected prior to construction starting to verify proper ESC BMP installation. Periodic inspections occur during construction and during or after major rain events to verify BMPs remain functional and are sufficient for site conditions. A final BMP inspection occurs prior to final project sign-off, to verify that the site has been sufficiently stabilized and BMPs can be removed. The City also inspects all new stormwater treatment and flow control facilities prior to project completion, both for facilities that will remain under private control and facilities that will be transferred to City ownership or management.

In 2023, City staff will discuss new options for improvements to construction inspection processes, both to improve efficiency and effectiveness of inspections and to help minimize the likelihood of future construction-related illicit discharge events.

Operations and Maintenance (S5.C.7)

This section describes the permit requirements and current City activities related to pollution prevention and operations and maintenance for municipal operations. Per the current Permit, each City shall implement an Operations and Maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

Permit Requirements

- Implement maintenance standards that are as protective, or more protective, of facility function than those specified in Chapter 4 of Volume V of the SWMMWW.
- 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 the adopted maintenance standards.
- Conduct spot checks of potentially damaged permanent treatment and flow control BMPs/facilities (other than catch basins) after major storm events (greater than 10-year, 24-hour recurrence interval).
- 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 maintenance standards established in the Stormwater Management Manual for Western Washington.
- 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.
- Implement an ongoing training program for employees of the City whose construction, operations or maintenance job functions may impact stormwater quality. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing.
- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the City in areas subject to this Permit that are not required to have coverage under the Industrial Stormwater General Permit, or another NPDES permit that authorizes stormwater discharges associated with the activity
- Document policies, practices and procedures to reduce stormwater impacts from all Permittee lands. Create a procedural document for BMPs for City operations – by 12/31/22.
- Maintain records of inspections and maintenance or repair activities conducted by the City.

Current and Planned Activities for 2023

Regulatory and Enforcement Activities

On May 16, 2022, the City adopted the 2021 King County Surface Water Design Manual (KCSWDM) and Stormwater Pollution Prevention Manual (SPPM), which includes maintenance standards and requirements of drainage structures such as flow control, conveyance, and water quality, as well as Best Management Practices (BMPs) for Commercial, Multi-Family and Residential Properties.

Stormwater Facility Inspection Program

Inspection of both City and privately owned drainage facilities occurs annually by City staff. Inspection and maintenance records for both City-owned and private drainage facilities are tracked and documented utilizing the City's asset management system, Azteca Cityworks.

Private Stormwater Facility Inspections

The City has implemented a long-term Operations and Maintenance (O&M) program for post-construction private stormwater facilities and BMPs. City staff inspects and maintains the records of post-construction stormwater controls, including structural BMPs, at new development and redevelopment projects. These sites have been catalogued as Burien "Commercial Stormwater Facilities" (listed as CSF###). Records of installed infrastructure and all inspection and maintenance activities are kept. In 2022, City staff inspected 297 private facilities, with 244 sites passing initial or follow-up inspections. 11 sites failed to comply with required maintenance timelines as of December 31, 2021, due to inability or unwillingness to respond to repeated written notifications from City staff to remind them of these maintenance requirements. These sites will be referred to Code Enforcement for follow-up action, and will be contacted again during the 2023 inspection effort to attempt to bring them into compliance (in addition to Burien's code enforcement process). For 2023, the number of active sites has increased to 300, all of which are expected to be inspected this year.

City-Owned Stormwater Facility Inspections

In 2022, City staff inspected all 120 active City-owned facilities. For 2023, the number of active facilities has increased to 122, all of which are expected to be inspected this year.

The City also conducts spot checks of all City-owned detention/retention ponds after major storms and documents these inspections as required by the Permit. On February 27-28, 2022, Burien received 3.2" of rain in 24 hours, and 4.1" in 36 hours, which qualifies as a 10-year storm. On March 1, 2022, all significant City-owned stormwater facilities were inspected to comply with S5.C.7.c.ii. No damage was observed and no followup maintenance was necessary.

Catch Basin Inspections

Beginning in 2013, the City implemented a 2-year catch basin inspection cycle. Publicly owned catch basins south of 140th St are inspected in ODD years, and CBs north of 140th St are inspected in EVEN years. This North-South split on alternating years will continue into the future. In 2022, City staff inspected CBs in the Northern half of the City. For 2023, the City is current on its inspection schedule, and will inspect all basins in the Southern half as planned.

Stormwater Pollution Prevention Plan (SWPPP) for City-operated facilities

The City will continue to implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated in the areas subject to this permit. The City's SWPPP was updated in 2022 to satisfy the requirement described in S5.C.7.f and will continue to be revised and updated as conditions change.

Policies and Procedures to reduce stormwater impacts (BMP plan for City Operations)

In 2018, prior to the current NPDES Permit becoming effective, the City developed a Standard Operating Procedures document for City operations, which included all referenced BMPs. This document satisfies the requirement described in S5.C.7.d, required to be completed by December 31, 2022.

Source Control Program for Existing Development (S5.C.8)

Each Permittee shall implement a program to prevent and reduce pollutants in runoff from areas that discharge to MS4s.

Permit Requirements

- By August 1, 2022, adopt ordinances or other enforceable items requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities.
- By August 1, 2022, establish an inventory that identifies publicly and privately owned commercial and industrial properties which have the potential to generate pollutants to the Permittee's MS4.
- By January 1, 2023, implement an inspection program for sites identified above, inspecting 20% of listed sites annually, and 100% of sites identified through legitimate complaints.
- By January 1, 2023, 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 and Planned Activities for 2023

Source Control Program Development

In late 2021, City staff began working on the development of Burien's Source Control Business Inspection Program. Early phases of this work included researching all active businesses in Burien, assessing relevant BMPs from the adopted SPPM (Stormwater Pollution Prevention Manual), and developing inspection templates through Burien's asset management software Cityworks.

Tasks completed in 2022 include:

- Finalized business list for the 2023 inspection year, including utilities and other public sites prior to the Permit deadline of 8/1/22. This included separating businesses into ranked priorities, which will direct staff on the order of sites to inspect through the remainder of the Permit term.
- Finalize inspection templates for all business categories in Cityworks, the City's asset management software.
- Four City inspection staff were trained to conduct source control inspections. They attended the Dept. of Ecology provided training in Fall 2022.
- Begin development of a Source Control Program procedural document, to instruct current and future staff on Program details. This document will also include a formalized process for follow-up inspections and Code Enforcement when necessary.
- Conducted a code review in early 2022, and verified that existing enforcement language was present in Burien Municipal Code. No changes were necessary to comply with Permit requirements S5.C.8.b.i and S5.C.8.b.iv.
- In December 2022, letters were sent out to all businesses selected for inspection in 2023 (automotive related businesses), notifying them of the program and upcoming inspection, and

providing some information on proper practices and BMPs. This is expected to continue each year for the following year's inspections.

All Permit-required tasks were completed prior to the 8/1/22 and 1/1/23 deadlines, respectively.

As program implementation begins in early 2023, several items developed in 2022 will be adjusted as staff get more familiar with this program and its needs.

Continuing tasks for 2023 include:

- On-site inspection walkthroughs for all City inspection staff, along with program managers. These are opportunities to learn the inspection process together, using actual Source Control sites within the City.
- The newly hired inspector that will be leading inspections for this program will attend the online version of the Ecology Source Control training that other staff attended in 2022.
- Finalizing the inspection documentation process. This will be an iterative process, tweaking items during the early year inspections before deciding on a final process to use the rest of the year.
- Prior to the 2024 inspections, processes may be adjusted as needed for improved efficiency.

Monitoring and Assessment (S8)

This section describes the permit requirements, current activities, and planned actions related to monitoring and assessment of stormwater related issues.

Permit Requirements

- Notify Ecology by December 1, 2019, which of the options for Status and Trends Monitoring the City chooses to carry out during this permit cycle. These choices are either to pay into a collective fund for monitoring in the Stormwater Action Monitoring (SAM) program, or to conduct status and trends monitoring themselves, according to section S8.A.2 of the Permit.
- Notify Ecology by December 1, 2019, which of the options for Stormwater Management Program Effectiveness Studies Monitoring the City chooses to carry out during this permit cycle. These choices are either to pay into a collective fund for monitoring in the Stormwater Action Monitoring (SAM) program, or to conduct effectiveness study monitoring themselves, according to section S8.B.2 of the Permit.

Current and Planned Activities for 2023

Stormwater Monitoring Program activities

The City has taken the “pay-in” option for regional monitoring for both monitoring tasks required under S8.A and S8.B.

Appendix A

City of Burien

2019 - 2023 IDDE Program Field Screening Efforts

In 2019, in addition to required Field Screening inspections, City staff performed validation inspections of mapped outfalls that were suspected of being incorrectly documented. Field screening inspections were performed for 6% of the MS4, all of which occurred after 8/1/19 (the beginning of the current Permit term). Validation inspections occurred for 19% of the MS4, with 6% of the 19% occurring after 8/1/19, for a total of 19% of the MS4 inspected in the calendar year with 12% after 8/1/19. The validation inspections resulted in these assets being reclassified or removed from the City's GIS mapping outright. For 2020, City staff was significantly limited by COVID restrictions, and was only able to inspect an additional 4% of the City's system (based on percentage of identified outfalls). In 2021, City staff worked towards inspecting remaining outfalls (and subsequent nodes) and was able to inspect 14% of the City's MS4. In 2022, staff assessed whether it was feasible to inspect the remaining outstanding outfalls, and inspected several of the remaining sites, as well as beginning to inspect previously inspected nodes, for a total of 20% inspected in the calendar year. As of 12/31/22, staff has inspected 94% of the MS4.

For 2023, staff will continue inspecting sites that have been inspected previously and will attempt to inspect some of the outstanding sites that have not been inspection through this program previously.