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# The City of SeaTac

## 2024 Stormwater Management Program (SWMP) Plan

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**City of SeaTac**  
**Public Works Department**  
**4800 South 188<sup>th</sup> Street**  
**SeaTac WA 98188-8605**

Prepared in compliance with the 2019 Phase II Municipal Stormwater National Pollutant Discharge Elimination System and State Discharge General Permit for discharges from Small Municipal Separate Storm Sewer Systems, Permit #WAR045541

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## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION</b> .....	<b>1</b>
<b>2.0</b>	<b>PERMIT COORDINATION EFFORTS (S5.A.5)</b> .....	<b>1</b>
2.1	COORDINATION AMONG PERMITTEES.....	1
2.2	COORDINATION AMONG CITY DEPARTMENTS.....	2
<b>3.0</b>	<b>STORMWATER PLANNING (S5.C.1)</b> .....	<b>2</b>
3.1	INTER-DISCIPLINARY TEAM.....	2
3.2	LONG-RANGE PLAN UPDATES.....	2
3.3	LOW IMPACT DEVELOPMENT.....	2
3.4	STORMWATER MANAGEMENT ACTION PLAN (SMAP).....	2
<b>4.0</b>	<b>PUBLIC EDUCATION AND OUTREACH (S5.C.2)</b> .....	<b>3</b>
4.1	REGIONAL PROGRAM ELEMENTS.....	3
4.2	BUILDING GENERAL AWARENESS.....	3
4.3	AFFECTING BEHAVIOR CHANGE.....	4
4.4	STEWARDSHIP OPPORTUNITIES.....	5
<b>5.0</b>	<b>PUBLIC INVOLVEMENT AND PARTICIPATION (S5.C.3)</b> .....	<b>6</b>
<b>6.0</b>	<b>MS4 MAPPING AND DOCUMENTATION (S5.C.4)</b> .....	<b>6</b>
<b>7.0</b>	<b>ILLICIT DISCHARGE DETECTION AND ELIMINATION (S5.C.5)</b> .....	<b>7</b>
7.1	IDDE PROCEDURES.....	7
7.1.1	<i>Field Screening</i> .....	7
7.1.2	<i>Incident Response</i> .....	8
7.2	IDDE COMMUNICATIONS.....	8
7.2.1	<i>Incoming IDDE Reports</i> .....	8
7.2.2	<i>External IDDE Notifications</i> .....	8
7.3	REGULATORY MECHANISMS.....	9
7.4	EMPLOYEE TRAINING.....	9
7.5	IDDE RECORDKEEPING.....	9
<b>8.0</b>	<b>CONTROLLING RUNOFF FROM DEVELOPMENT AND CONSTRUCTION (S5.C.6)</b> .....	<b>9</b>
8.1	REGULATORY STANDARDS AND ENFORCEABLE MECHANISMS.....	10
8.2	PROCESS FOR PERMITTING, SITE PLAN REVIEW, INSPECTION AND ENFORCEMENT.....	10
8.3	NOTICE OF INTENT (NOI).....	11
8.4	EMPLOYEE TRAINING.....	11
<b>9.0</b>	<b>OPERATIONS AND MAINTENANCE (S5.C.7)</b> .....	<b>11</b>
9.2	MAINTENANCE OF PRIVATE STORMWATER FACILITIES.....	11
9.3	MAINTENANCE OF PUBLIC STORMWATER FACILITIES.....	12
9.3.2	<i>Street Waste Disposal</i> .....	12
9.3.3	<i>Spot Checks</i> .....	12
9.4	RECORDS MAINTENANCE AND MANAGEMENT.....	13
9.5	MUNICIPAL PRACTICES.....	13
9.6	STORMWATER POLLUTION PREVENTION PLAN (SWPPP).....	14
9.7	STORMWATER BMP EMPLOYEE TRAINING.....	14
<b>10.0</b>	<b>SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT (S5.C.8)</b> .....	<b>14</b>
<b>11.0</b>	<b>MONITORING AND ASSESSMENT (S8)</b> .....	<b>15</b>
<b>12.0</b>	<b>REPORTING AND RECORDKEEPING REQUIREMENTS (S9)</b> .....	<b>15</b>
12.1	ANNUAL REPORT.....	15
12.2	RECORDKEEPING REQUIREMENTS.....	15

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## 1.0 INTRODUCTION

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In 2007, the City of SeaTac began operating under a Western Washington Phase II Municipal Stormwater National Pollutant Discharge Elimination System Permit (Permit). The City implements the Permit in compliance with the Federal Water Pollution Control Act (the Clean Water Act), Title 33 United States Code, Section 1251; and the State of Washington Water Pollution Control Law, Chapter 90.48 Revised Code of Washington.

The current five-year Permit is effective from August 1, 2019, to July 31, 2024. It authorizes discharges from the City's municipal separate storm sewer system (MS4) to surface waters and to groundwaters.

This document constitutes SeaTac's 2024 Permit-required Stormwater Management Program Plan (SWMP Plan). The SWMP Plan establishes programs and activities including an on-going system for gathering, tracking, maintaining, evaluating, and using information to adaptively manage City-implemented stormwater management activities. It also provides written documentation that informs the public of planned Permit activities. The *2024 SWMP Plan* organizational structure includes program components and related Permit sections as listed below:

- Coordination Efforts (S5.A.5)
- Stormwater Planning (S5.C.1)
- Public Education and Outreach (S5.C.2)
- Public Involvement and Participation (S5.C.3)
- MS4 Mapping and Documentation (S5.C.4)
- Illicit Discharge Detection and Elimination (S5.C.5)
- Controlling Runoff from Development, Redevelopment and Construction Projects (S5.C.6)
- Operations and Maintenance (S5.C.)
- Source Control for Existing Development (S5.C.7)
- Monitoring and Assessment (S8)
- Reporting and Recordkeeping (S9)

## 2.0 PERMIT COORDINATION EFFORTS (S5.A.5)

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### 2.1 Coordination Among Permittees

To help clarify roles and responsibilities for the control of pollutants between physically interconnected and permitted MS4s, SeaTac implements Permit coordination efforts with adjacent entities as necessary. Also, to avoid conflict related to plans, policies and regulations, the City coordinates management activities for shared water bodies and or watersheds. As a matter of course, the City interacts with the following regional groups and stormwater management forums:

- Regional Permit Coordinators (Phase I and Phase II jurisdictions)
- Stormwater Outreach for Regional Municipalities (STORM)
- Regional Operations and Maintenance Program (ROADMAP)
- Des Moines Creek Basin Committee (City of Des Moines, Port of Seattle)
- Miller/Walker Creeks Stewardship Program (King County, City of Burien, City of Normandy Park, Port of Seattle)
- WRIA 9 (Water Resource Inventory Area) Stakeholder Watershed Planning (17 different participating jurisdictions)
- The Stormwater Action Monitoring Work Group (SAM)
- The Regional Road Maintenance ESA Forum

## **2.2 Coordination Among City Departments**

Internally, implementation of SeaTac’s 2024 SWMP Plan is coordinated through a City Policy (CW-034) that defines departmental responsibilities and actions. Coordination elements include program development, reporting, notification, documentation, recordkeeping, data tracking and employee training.

## **3.0 STORMWATER PLANNING (S5.C.1)**

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In 2024, SeaTac will continue Permit Stormwater Planning efforts that establish polices, strategies and water quality management tools for long-term protection of receiving waters as necessary. Stormwater Planning includes the following four elements:

### **3.1 Interdisciplinary Team**

Stormwater Planning Interdisciplinary Team members represent Public Works, Engineering Review, Capital Improvement Program, Planning, Maintenance & Operations, Asset Management, and Information Technology. The team informs and assists in the development of the Permit-required Stormwater Planning program. During the current year, the I-Team will meet as-needed to discuss overlapping stormwater topics as they relate to both the SMAP and the development of the City’s update to the Surface Water Comprehensive Plan (SWMCP) and SWM Rate Study.

### **3.2 Long-range Plan Updates**

SeaTac reviews water quality and watershed protection policies, strategies, codes and other measures to identify stormwater management needs. This work also informs whether locally initiated or state-mandated long-range land use plan updates are called for (those designed to accommodate growth or transportation for protecting/improving receiving water health). Per Permit section S5.C.1.6.i (b), the City developed a report describing long-range planning coordination that has taken place during the current Permit term.

### **3.3 Low Impact Development**

The City continues to require implementation of Low Impact Development (LID) Principles and LID BMPs as needed. Accordingly, LID BMPs and LID principles are encouraged as a preferred and commonly-used approach to site development. Annual assessments help identify administrative or regulatory barriers. Changes may be implemented when local development-related codes, rules, standards or other enforceable documents support their need.

### **3.4 Stormwater Management Action Plan (SMAP)**

SeaTac has developed a Stormwater Management Action Plan (SMAP). The multi-step SMAP effort includes a watershed inventory, identification of existing water quality conditions for each receiving water catchment area in the city, and assessment and prioritization of identified receiving waters. SMAP assessment and prioritization functions to:

- Conserve, protect or restore receiving waters through stormwater and land management strategies that act as water quality management tools.
- Reduce pollutant loading.
- Address hydrologic impacts from existing development and help plan for expected future buildout conditions.

Miller Creek was the high priority catchment area selected for the SMAP. As the City works to update the SWMCP this year, a resource planning effort will identify tasks necessary to meet implementation of the SMAP. The SMAP will involve targeted stormwater management actions that include the following:

- New stormwater retrofits or best management practices.
- Possible land management and development strategies.
- Targeted, enhanced or customized stormwater management actions.
- Possible changes to long-range plans.

## **4.0 PUBLIC EDUCATION AND OUTREACH (S5.C.2)**

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The City’s Public Education and Outreach program serves a diverse SeaTac community. With that in mind, our Public Education program strategically delivers effective messaging to residents, property owners, businesses, and visitors to build general awareness, effect behavior change, and create stewardship opportunities.

### **4.1 Regional Program Elements**

The City utilizes various regional resources and public education partnerships, including but not limited to:

#### Stormwater Outreach for Regional Municipalities (STORM)

- Incorporation of practical municipal stormwater information obtained from regular STORM meetings, symposiums, networking, programs, and resources.
- Co-branding *Puget Sound Starts Here* (PSSH) materials where possible.

#### Washington Stormwater Center (WSC)

- Utilization of WSC municipal stormwater management and training resources to improve public education and outreach communications, framing of messages, designing of ideas for targeted audiences, engagement of overburdened communities, and creation of appropriate outreach materials.

#### King County Local Hazardous Waste Program (KCLHWP)

- Partnering with KCLHWP to assist with business inspections at problematic sites. This program helps to protect public health and the environment by reducing hazardous material exposure at home and at work. Additionally, SeaTac promotes the KCLHWP Voucher Incentive Program that reimburses eligible businesses for costs associated with disposal of sediment or contaminants accumulated within private flow control, conveyance or water quality facilities.

#### Regional Meetings

- Participating in regional groups (see Section 2.1) to collaborate on Permit-related public education opportunities.

### **4.2 Building General Awareness**

The City of SeaTac implements a comprehensive multi-media Stormwater General Awareness Program that utilizes social media messaging via the [City of SeaTac Blog](#) and the [City of SeaTac Facebook Page](#). Table 1 identifies the various Permit-required General Awareness program elements, target audiences, and outreach approaches used by SeaTac throughout 2024.

**Table 1. Permit-required public education and outreach general awareness program elements**

Approach	Target Audience	Description	Subject Area
City Website, Blog and Facebook Page	General Public (including school-age children); and businesses (home-based or mobile)	Permit information, Stormwater Design/BMP Manual, Spill Hotline, volunteer opportunities (curb marker, lake monitoring), stormwater/surface water issues and events, residential & charity car washing, rain barrels, pet waste management, GIS maps and private water quality facility inspection information.	General impacts of stormwater on surface waters (including impervious)
City Web Page	Engineers, contractors, developers, land use planners	Various types of information including LID infeasibility study, LID criteria, GIS maps, technical guidance and focus sheet.	Low impact development (LID) principles and LID BMPs
Public Displays and Printed Materials at City Hall	General Public and businesses (home-based or mobile), engineers, contractors, developers, land use planners	Various types of information including spill hotline, volunteer opportunities (curb marker, lake monitoring), residential car washing, rain barrels, pet waste management, LID infeasibility study, criteria, maps, technical guidance and focus sheet.	General impacts of stormwater on surface waters (including impervious); Low impact development (LID) principles and LID BMPs
Get your Green On	General Public (including school-age children)	Municipal stormwater management educational, natural yard care and green-clean literature distribution at the annual event. City subsidized rain barrels for purchase.	General impacts of stormwater on surface waters (including impervious)
Recycling Events (Spring and Fall)	General Public (including school-age children)	Municipal stormwater management educational, natural yard care and green-clean literature at the two annual events. City subsidized rain barrels for purchase.	General impacts of stormwater on surface waters (including impervious)
Miller and Walker Creeks Stewardship Web Page	General Public	Cooperative effort involving the cities of Burien, Normandy Park, and SeaTac, the Port of Seattle, the Washington State Department of Transportation, and King County.	General impacts of stormwater on surface waters (including impervious); volunteer opportunities.
Salmon Tank and Display at SeaTac Community Center	General Public (including school-age children)	A salmon rearing aquarium installation designed to educate the public regarding the salmon lifecycle (from eggs to fry) and the connection to surface water resources (poster display). Salmon release is scheduled April 27, 2024.	General impacts of stormwater on surface waters (including impervious)
City Recycling Webpage	General Public	Garbage, recycling and food & yard waste management (including household hazardous waste issues and composting)	General impacts of stormwater on surface waters
Pet Waste Signage in City Parks	General Public	Signage encouraging citizens utilizing City parks to pick up after their pets.	General impacts of stormwater on surface waters

### 4.3 Affecting Behavior Change

The City collaborates to implement StormFest, an annual program that aids to reduce and/or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. The program’s target audience is school-age children. StormFest functions through an Interlocal Agreement between SeaTac and other regional program partners (including King County, City of Des Moines, and City of Normandy Park). Additionally, StormFest members also include Highline School District, the Environmental Science Center, and Enviro-Issues.

In 2023, StormFest was an in-person event held at Des Moines Beach Park. The three-day event brought together 42 station educators, two interpreters, and 46 volunteers to teach a total of 1,180 6th grade students from Highline School District middle schools. Students rotated among five stations and learned about their local watershed, macroinvertebrate pollution tolerance, and solutions to stormwater pollution. Additionally, Spanish speaking station educators were on hand.

Behavior Change assessment surveys measured overall student stormwater knowledge. Students were given pre-surveys and post-surveys to evaluate the presence of sustained behavior changes: A pre-survey was administered before the stormwater curriculum was introduced in the classroom; A post-survey was given at the end of the 2023 school year (after both classroom learning and StormFest participation). Evaluations are used to modify campaign strategies and/or program curriculum.

In total, 328 students completed both the pre-event and post-event surveys in 2023. The evaluations indicated that StormFest student displayed a change in understanding thorough and adoption of the targeted behaviors. Key findings from the surveys included:

- Students’ total knowledge score significantly increased from pre (M = 6.75) to post (M = 8.66),  $t(327) = -18.45, p < .001$ .
- There was an increase in students demonstrating an understanding of the connection between local actions/stormwater and Puget Sound from pre to post.
- The multiple choice format for the analyzed survey questions yielded higher pre and post test scores than previous years.

#### 4.4 Stewardship Opportunities

The City uses a variety of activities and events to raise stormwater quality awareness and to encourage community engagement and adoption of environmentally friendly behaviors. Table 2 describes stewardship outreach efforts that are offered or promoted by the City throughout 2024.

**Table 2. Permit-required public education and outreach stewardship program elements**

Activity or Event	Description	Subject Area
Drain Markers	Volunteers install plastic curb markers adjacent to stormwater catch basins with the message "Puget Sound Starts Here" to remind people of the connection between stormwater pollution, local streams, and Puget Sound.	General impacts of stormwater on surface waters
Lake Water Quality Monitoring	Volunteers are encouraged to assist the King County Department of Natural Resources monitor the water quality of Angle Lake. This work helps to identify potential environmental problems and/or illegal discharges.	General impacts of stormwater on surface waters
Adopt-a-Drain Program	Individuals, community organizations and businesses adopt storm drains in their neighborhood. Their efforts are tracked in an online account.	Encourages and enforces a commitment to stormwater pollution prevention.
Miller and Walker Creek Stewardship	Volunteer opportunities include planting of native trees and shrubs; pulling out invasive non-native plants; and cleaning up litter.	General impacts of stormwater on surface waters
Parks Clean Up Volunteer	Individuals or groups can organize park cleanup events at designated parks.	General impacts of stormwater on surface waters
Solid Waste/Recycling Volunteer	The annual <i>Get your Green On</i> event hosted by the City educates the public regarding recycling and sustainable practices, Natural Yard Care, household hazardous waste, water conservation (rain barrels), and composting. The event also utilizes volunteers to set out native plantings.	General impacts of stormwater on surface waters



## 5.0 PUBLIC INVOLVEMENT AND PARTICIPATION (S5.C.3)

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Within SWMP Plan and SMAP frameworks, the City provides ongoing public involvement, participation, and decision-making opportunities. Furthermore, SeaTac continues to identify and implement more effective ways to engage the overburdened community. These efforts include the execution of a Community Engagement Plan which outlines reasonable efforts the City makes to eliminate or reduce limited English proficiency as a barrier to accessing City government programs or activities. This Plan is patterned after the United States Department of Justice (U.S. DOJ) Language Access Plan.

Throughout the year, the public is encouraged to comment on both the SWMP Plan and SMAP. Public involvement and participation outreach efforts involve postings of important and timely messages and meeting invitations on the Public Works Stormwater Management web page, and through specialized media, including the [City of SeaTac Blog](#) and the [City of SeaTac Facebook Page](#).

The following includes public involvement and participation opportunities highlighted for 2024:

- Posting of the 2024 SWMP Plan by March 31.
- Provide multiple opportunities for the public to engage in the preferred plan outcomes, such as surveys and public meetings. The purpose will be to provide an approach to engaging the public, providing information on plan development, and proactively addressing public needs and concerns.
- Posting of routine state and local public notices when required for certain construction and planning efforts.

## 6.0 MS4 MAPPING AND DOCUMENTATION (S5.C.4)

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The City implements a comprehensive program to map and document the municipal separate storm sewer system (MS4). Ongoing mapping involves procedures to identify, analyze and process Geographic Information Systems (GIS) data. Maintained feature mapping data includes: stormwater conveyance infrastructure, outfalls, discharge points, receiving waters, treatment and flow control facilities, tributary conveyances, drainage areas, land use, connections and other components.

IT, GIS, and Public Works Operations, and Asset Management work together to generate MS4 feature data. These efforts help the City meet Permit-required stormwater management program goals. Municipal work that benefits from mapping information includes future planning, economic development, engineering review, public education, spill response, private water quality facility and source control inspections, construction, operations and maintenance. Through an external web-based application portal, SeaTac also provides map-based information resources for residents, visitors, engineers, planners, designers and emergency responders.

In 2024, the City of SeaTac continues to support existing MS4 mapping through:

- Improving stormwater data as needed within the Geographic Information System (GIS) to enhance user experience, ensure current and future regulatory requirements, and to serve as a system of record.
- Implementation of a Computerized Maintenance Management System (CMMS) designed to provide and track work orders and service requests. The CMMS may also help manage stormwater assets and perform risk/cost analyses.
- Performing CCTV video inspections to document MS4 asset conditions as needed.

- Integrating various asset management software programs to assist in stormwater resource allocation, prioritization, funding strategies and maintenance schedules.

To fully meet Permit requirements, the City will respond to all mapping requests in compliance with national security laws and directives. SeaTac makes these GIS geospatial data easily available to the public via the internet on the [SeaTac Maps and GIS](#) webpage, with viewable and downloadable MS4 mapping formats.

## 7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (S5.C.5)

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The City carries out a comprehensive Illicit Discharge Detection and Elimination (IDDE) program for preventing, detecting, characterizing, tracing, and eliminating stormwater pollution. Permit-required minimum performance measures involve:

- Methods for initiating investigations.
- Procedures for recordkeeping, reporting and correcting or removing illicit connections, spills and other illicit discharges.
- Processes for informing public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.
- Public education and code enforcement mechanisms that effectively prohibit non-stormwater discharges into the MS4 to the maximum extent allowable.
- Training programs for all municipal field staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges (including spills and illicit connections).

### 7.1 IDDE Procedures

The written *SeaTac Illicit Discharge Detection and Elimination Field Procedures and Response Plan (IDDE Plan)* provides a framework for:

- Characterizing any found or reported illicit discharges.
- Tracing illicit discharge sources (visual inspections monitoring of pollutants).
- Eliminating discharges: notification of appropriate authorities, notification of property owner, technical assistance, follow-up inspections and use of compliance strategies (escalating enforcement and legal actions).
- Developing and implementing employee training and recordkeeping programs.

#### 7.1.1 Field Screening

In meeting Permit requirements, SeaTac has developed a comprehensive Field Screening methodology to detect and identify non-stormwater discharges and illicit connections into the MS4. The methodology is described in the *SeaTac IDDE Plan*.

Field screening is performed in tandem with ongoing program assessment, inspection, and cleaning of the MS4 (see Section 9.0). The objective of the city's IDDE Field Screening Program is to routinely inspect, evaluate and investigate the MS4 to identify and eliminate potential sources of stormwater pollution during annual catch basin inspections. Staff are trained to identify unusual conditions encountered during these Field Screening exercises. Documented observations may then trigger follow up action as needed: notification, characterization, isolation, source tracing, and compliance. Follow up actions also consider local stormwater system characteristics to help us identify and react to water quality concerns. In accordance with Permit requirements, SeaTac field screens a minimum of 12% of the MS4 on average each year.

Per SeaTac Field Screening methodology, MS4 catch basins are inspected annually and noted for the presence of pollution. Subsequently, all upstream lengths of MS4 conveyance (pipe segments and ditches) associated with each of these inspected catch basins are added up. As a result, percent field screened per year is calculated as: the total inspected feet of MS4 (catch basins plus upstream lengths), divided by the total feet of known MS4 in the city.

### **7.1.2 Incident Response**

SeaTac implements procedures for spill response and improper disposal into the MS4. In doing so, designated city personnel respond to incidents and implement procedures to control and eliminate sources of stormwater pollution (with priority given to incidents that impact public safety, public health and the environment). *IDDE Incident Response Procedures* provide for:

- Definition of roles and responsibilities (both internal and external).
- Spill response, emergency response, and outside agency coordination as needed.
- Standardized reporting procedures, investigations, documentation, and follow-up procedures.

## **7.2 IDDE Communications**

Established communication processes result in well-coordinated IDDE incident responses. Public Works M&O Stormwater staff that are assigned to track IDDE complaints obtain all necessary and relevant information for the purpose of evaluating potential public health, public safety, or environmental threats. If the report is credible, a formal IDDE compliance investigation is launched to address the nature of the discharge, determine the source of the discharge, identify the responsible party, and eliminate the contamination. The elements of an effective investigation include: immediate characterization of the illicit discharge threat, initiation of notifications, site investigation, documentation of conditions and completion of recordkeeping.

### **7.2.1 Incoming IDDE Reports**

Receipt of illicit discharge reports are communicated to the City in various ways including, but not limited to:

- Direct calls to the Spill Hotline (206-973-4770), e-mail, SeeClickFix<sup>®</sup> web/mobile application complaints, after-hours dispatch calls, and in-person communication.
- Information received from internal city operations (staff communication, personal observation, inspection program referrals and MS4 field screening operations).
- Referrals from Ecology's Environmental Report Tracking System Reports.
- External agency referrals.

### **7.2.2 External IDDE Notifications**

Once information concerning a suspected or known illicit stormwater discharge is reported to or received by City staff, proper notification sequences are triggered that are based upon the severity of the incident. If necessary, appropriate external entities are notified, which may include:

- Local Fire District
- Department of Ecology
- Local Sanitary Sewer Authority
- Public Water Utility
- SeaTac Police
- King County Public Health
- Adjacent jurisdictions or agencies

### 7.3 Regulatory Mechanisms

Ordinances, SeaTac Municipal Code (SMC) and other enforceable documents enable the City to implement the IDDE program through three regulatory mechanisms:

- SMC 12.12: Surface and Stormwater-Illicit Discharge Detection and Elimination
- SMC 12.10: Surface and Stormwater Management
- SMC 1.15: Code Enforcement

### 7.4 Employee Training

All affected City employees receive in-house Permit-required IDDE training as needed. Affected staff include those who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges. Follow-up training is provided as needed to address changes in procedures, techniques, requirements, or staffing, which may include annual refreshers, review of case-studies and informal training in the form of staff meetings.

### 7.5 IDDE Recordkeeping

IDDE compliance investigations involve rapid assessment of threats to public health, public safety or the environment. Effective SeaTac IDDE investigations begin with procedures that involve the collection and recording of relevant and accurate incident information. Accordingly, IDDE incident recordkeeping utilizes CityWorks®, a web-based work management system that prepares comprehensive internal Service Requests that contain the following standard information: date of incident, location, reporting source, pollutant, cause, corrective actions, photos, various forms of written communication and progress summary notes. Through the last few years, IT developed an improved web-based portal workflow within Cityworks that includes a more comprehensive IDDE reporting format for compliance assurance and documentation.

Pursuant to Special Condition S9.A, the City provides a yearly summary of IDDE incidents with the permit-required Annual Report (Section 12.1).

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## 8.0 CONTROLLING RUNOFF FROM DEVELOPMENT AND CONSTRUCTION (S5.C.6)

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SeaTac's Public Works Development and Construction Runoff Control program promotes public health, safety, and welfare by establishing a comprehensive approach to surface and storm water problems. This program reduces flooding, erosion and sedimentation, prevents/mitigates habitat loss, enhances groundwater recharge, and prevents water quality degradation. Drainage review is required for any proposed project (except those proposing only maintenance) that is subject to a City of SeaTac development permit or approval. Specific program elements include permitting, basin and sub-basin planning, land use regulation, facility construction approval, and post construction inspections.

The City of SeaTac implements and enforces this Permit-required program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction sites. The minimum performance measures of this Permit-required program are:

- Utilizing ordinances or other enforceable mechanisms to address runoff from new development, redevelopment, and construction site projects.
- Using requirements, limitations and criteria approved by Ecology.
- Implementing a permitting process with site plan review, inspection and enforcement capability to meet the standards.

- Making available, as applicable, the link to the electronic Construction Stormwater General Permit Notice of Intent (NOI) form for construction activity and, as applicable, a link to the electronic Industrial Stormwater General Permit NOI form for industrial activity to representatives of proposed new development and redevelopment.
- Enforcing local ordinances to control runoff from sites covered by stormwater permits issued by Ecology.
- Ensuring proper training for all development and construction staff involved with this program.

### **8.1 Regulatory Standards and Enforceable Mechanisms**

In compliance with current Permit requirements, a combination of codes and adopted standards enable the City to control runoff from new development, redevelopment, and construction sites. In 2022, SeaTac updated the necessary standards and enforceable mechanisms through the adoption of the 2021 King County Surface Water Design Manual (KCSWDM). This effort achieves equivalency with Ecology’s Stormwater Management Manual for Western Washington. Additionally, SeaTac employs the following applicable local regulations, rules, and standards:

- SMC 12.10: SeaTac Surface and Stormwater Management Code, including adoption of the most current KCSWDM.
- The City of SeaTac Addendum to the KCSWDM.
- SMC 1.15: Code Enforcement
- SMC 15.700: Critical Areas
- King County Road Design and Construction Standards

The Ecology-approved KCSWDM specifies limitations and criteria used to implement the minimum requirements in [Appendix 1](#) of the Permit to protect water quality and to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP). It also satisfies the State requirement under Chapter 90.48 RCW to apply All Known, Available and Reasonable Methods of Prevention, Control and Treatment (AKART) prior to discharge.

KCSWDM limitations and criteria include:

- Site planning requirements
- Best Management Practice (BMP) selection criteria
- BMP design criteria
- BMP infeasibility criteria
- LID competing needs criteria
- BMP limitations

### **8.2 Process for Permitting, Site Plan Review, Inspection and Enforcement**

SeaTac administers and reviews site engineering plans and development permits to address clearing, grading, paving, stormwater management system, roadway, and right-of-way activities. Furthermore, internal procedures provide for: project approval processing, inspection authority, inspection processes, inspection criteria, pre-acceptance review, re-inspection, and enforcement.

The City’s process for all stormwater-related construction involves:

- Review of all stormwater site plans for proposed development activities.
- Inspection, prior to clearing and construction, of all permitted development sites that have a high potential for sediment transport as determined through plan review.
- Inspection of all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls.

- Management of 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 (or when construction has stopped and the site is fully stabilized), to identify maintenance needs and enforce compliance with maintenance standards as needed.
- Inspection of all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. Verification that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater treatment and flow control BMPs/facilities.
- Compliance with Permit requirements to achieve at least 80% of required inspections.

The Runoff Control program also includes recordkeeping and documentation that uses LAMA<sup>®</sup> (a new GIS-based integrated local government software solution) to create, store, and process all permitting information. LAMA<sup>®</sup> documents formal permit applications, inspection records, administrative entries, attachments, alerts, project holds and enforcement. The software is tightly linked with the City’s GIS system to provide real time status regarding inspections and enforcement.

### **8.3 Notice of Intent (NOI)**

The City of SeaTac continues to make Notices of Intent (NOI) available to new development and redevelopment proponents and representatives when appropriate. These include NOIs triggered under the [NPDES Construction Stormwater General Permit](#) and the [NPDES General Industrial Stormwater Permit](#).

### **8.4 Employee Training**

The City ensures proper formal training (for example CESCL) for all staff whose primary job duties involve Permit-required activities associated with the Development and Construction Runoff Control Program. When necessary, follow-up training occurs in the form of review during routine staff meetings to address changes in procedures, techniques or staffing. The City documents and maintains all required training records.

## **9.0 OPERATIONS AND MAINTENANCE (S5.C.7)**

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To prevent or reduce stormwater impacts, SeaTac implements a Permit-required program to regulate, inspect and document private and public maintenance activities. Implementation of standards under this program are as protective, or more protective, of facility function than those specified in Ecology’s Stormwater Management Manual for Western Washington. To meet these requirements, SeaTac uses the 2021 King County Surface Water Design Manual (KCSWDM), and other enforceable mechanisms.

Condition assessments and inspections of private and public stormwater facilities and systems involve measuring sediment levels, evaluating vegetation growth, inspecting for structural damage, and noting defects and problems. Proper system maintenance is necessary to protect downstream natural resources from flooding and water quality impacts. Private and public facilities and components inspected include, but are not limited to: detention ponds, infiltration facilities, detention tanks/vaults, flow control structures and catch basins.

### **9.2 Maintenance of Private Stormwater Facilities**

Established KCSWDM standards, City ordinances, and other enforceable mechanisms identify requirements and responsibilities for the operation and maintenance of private stormwater systems. SeaTac Public Works has established a program for long-term O&M inspection and enforcement of privately-owned stormwater treatment and flow control BMPs/facilities that discharge to the MS4. The following local regulations apply:

- SMC 12.10: SeaTac Surface and Stormwater Management Code
- SMC 1.15: Code Enforcement

The Private Maintenance Inspection program includes annual inspections of all Permit-regulated facilities. In the first half of each year, property owners are notified via letter of planned facility inspections. Scheduled inspections are conducted throughout the spring and summer. After inspections, comprehensive written findings are issued to property owners to indicate compliance, or to direct the need for corrective action as required. Work orders documenting each private maintenance inspection are tracked within Cityworks<sup>®</sup> (see Section 9.4).

### **9.3 Maintenance of Public Stormwater Facilities**

Public stormwater infrastructure owned or operated by SeaTac includes the system (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) designed or used for collecting or conveying stormwater. Publicly owned assets are inspected to identify structural concerns, sediment levels, or other functional defects. All inspection data are recorded in Cityworks<sup>®</sup>. Permit-required maintenance timelines for public stormwater conveyances include:

- Annual inspection of all stormwater treatment and flow control BMPs/facilities (including but not limited to detention facilities, permanent treatment BMPs/facilities; and bioretention, and permeable pavements).
- Inspection of all catch basins and inlets every year. This program utilizes location data and remote GIS capabilities allowing real-time inspection progress and concerns as they are found in the field.

#### **9.3.2 Street Waste Disposal**

The City manages the collection and disposal of routine stormwater-related wastes (both liquids and solids) that are generated from City-owned property. These wastes are properly disposed in compliance with Permit requirements, and in accordance with [Appendix 6 - Street Waste Disposal](#) guidelines.

- A limited amount of decant stormwater liquids are discharged into Valley View Sewer District sanitary sewer at an approved and permitted SeaTac Maintenance facility trash rack location.
- Uncontaminated solids are transported to the King County Renton Decant Station. This regional disposal facility is available for use by public agencies (including SeaTac) to manage and treat uncontaminated MS4 solids.
- PRS Group Washington in Tacoma serves as a disposal option when the King County facility is not available, or when known or suspect contamination is encountered.
- Maintenance and disposal operations are contracted out occasionally on an as-needed basis.

#### **9.3.3 Spot Checks**

SeaTac tracks local precipitation by monitoring and recording [King County Watershed and Ecological Assessment Program](#) hydrological data. Public Works staff log these data from two spatially representative rain gauge sites located in SeaTac, and calculate their running totals (24-hr/10-year recurrence) to determine if major storm events have resulted. The two rain gauges continually monitored in SeaTac are:

- Lake Reba (#42u), north of SeaTac International Airport
- Des Moines Creek, (#11u), south of SeaTac International Airport

In 2023, one storm event exceeded the 24-hr/10-year recurrence interval. Subsequently, in-person spot checks of all SeaTac-owned stormwater treatment and flow control BMPs/facilities took place immediately afterward. As a result, the spot checks did not indicate a need for the implementation of

corrective actions in accordance with 2021 King County Surface Water Design Manual [Maintenance Requirements](#).

#### **9.4 Records Maintenance and Management**

Public Works utilizes Cityworks<sup>®</sup> for private and public stormwater systems records maintenance and management. Cityworks<sup>®</sup> is a GIS-centric enterprise asset management system that manages, tracks and analyzes stormwater infrastructure assets. In 2023, IT developed an improved web-based portal workflow within Cityworks that produces a more comprehensive format for private inspection reporting and compliance.

Cityworks<sup>®</sup> offers a custom database of work orders, service requests, and inspection records generated for Permit-required activities. Using an ArcGIS geodatabase, Cityworks<sup>®</sup> delivers spatial work activity and mobile field operation applications that generate Permit-compliant service requests and work orders. Comprehensive tracking of records includes inspections, investigations, maintenance and enforcement. The City continues to modify Cityworks<sup>®</sup> processes and functionality to improve levels of service and to better meet Permit requirements.

#### **9.5 Municipal Practices**

SeaTac implements stormwater pollution prevention practices that address municipal activities and operations associated with all lands owned or maintained by the City. Affected public lands include streets, parking lots, buildings, parks, open space, road right-of-ways, maintenance yards, and stormwater treatment and flow control BMPs/facilities.

In 2022, a Stormwater BMP Policy was created to provide coordination of City-wide efforts to reduce polluted stormwater runoff into and out of municipal drainage systems, facilities and properties to the maximum extent practicable. The policy ensures that practices and procedures are fully implemented, and that they comply with the applicable NPDES Permit requirements.

Per the BMP Policy, all affected city operations and activities (including outside contracted work) must adhere to a combination of guidance documents and materials referenced below that describe specific stormwater pollution best management practices which have been adopted for all lands owned or maintained by the City of SeaTac. Affected staff include those that work in Public Works, and Parks, Community Programs & Services.

- *2021 King County Stormwater Design Manual (KC SWDM)*, adopted per SeaTac Municipal Code (SMC) 12.10 and the NPDES Permit (Section S5.C.6.a). This document provides minimum inspection and maintenance requirements (Appendix A) for all publicly owned stormwater treatment and flow control BMPs/facilities and components.
- *2021 King County Stormwater Pollution Prevention Manual (SPPM)*. This document provides best management practices (BMPs) for managing stormwater; it lists detailed information and description of actions to prevent/eliminate stormwater, surface water, and groundwater contamination. Municipal-related stormwater pollution prevention practices and procedures covered in the SPPM involve activities such as storage of pesticides and fertilizers, pressure washing, stationary fueling operations, vehicle and equipment repair and maintenance, and snow response operations.
- *Regional Road Maintenance ESA Program Guidelines*. This document addresses site-specific BMPs: roadway maintenance operations, utility maintenance, maintenance of stormwater facilities, and other right-of-way (ROW) structure work. Maintenance activities covered under ESA Guidelines include, but are not limited to street sweeping, maintaining and cleaning



enclosed drainage systems, and mowing bio-swales and cleaning water quality vaults. (The City is a WSDOT-led Regional Road Maintenance Program Forum Member that periodically participates in workshops and training geared toward the use of Best Management Practices to achieve positive environmental outcomes, including the protection of habitat and water quality.)

### **9.6 Stormwater Pollution Prevention Plan (SWPPP)**

The City implements a written Stormwater Pollution Prevention Plan (SWPPP) for the Public Works Maintenance facility. This site functions as a heavy equipment maintenance and material storage yard subject to Permit requirements. The SWPPP was updated in 2022 to fully meet permit requirements per S5.C.8.f. The SWPPP includes the following information:

- A detailed description of the operational and structural BMPs in use.
- A BMP implementation schedule.
- Annual inspections of the facility (including visual observations of discharges, to evaluate the effectiveness of the BMPs).
- An inventory of the materials and equipment stored on-site.
- Activities conducted at the facility which may be exposed to precipitation or runoff and 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 facility spill incidents.

### **9.7 Stormwater BMP Employee Training**

The City implements an ongoing stormwater BMP training program for all SeaTac employees that conduct municipal-related job functions that may impact stormwater quality (construction, operations, or maintenance). Training addresses the importance of protecting water quality, operation and maintenance standards, inspection procedures, relevant SWPPPs, selection of appropriate BMPs, ways to perform job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns. Follow-up training is provided as needed to address changes in procedures, techniques, requirements, or staffing, which may include annual refreshers and informal training in the form of staff meetings. The City documents and maintains municipal-related training records, including dates, activities, course descriptions, and names and positions of staff in attendance.

## **10.0 SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT (S5.C.8)**

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In 2024, the City will continue to implement a Permit-required Source Control Program to prevent and reduce contamination discharging into the MS4 from stormwater pollution-generating sites and businesses in SeaTac. Elements of the Source Control Program include:

- Developing an inventory that includes approximately 140 publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4.
- Performing annual inspections on a minimum 20% of the inventory sites.
- Establishing effective BMPs to control pollution discharging into the MS4.
- Implementing a progressive enforcement program that requires sites to comply within a reasonable period.
- Providing ongoing staff training for those responsible for implementing the source control program.

To help continue successful implementation of the Source Control program, stormwater personnel participate in the Business Inspection Group (BIG), a collaborative group of municipal stormwater permittees hosted by the Washington Stormwater Center. BIG periodically convenes to share resources and guidance on best practices, enforcement strategies, public education, and inspection tracking and management.

## 11.0 MONITORING AND ASSESSMENT (S8)

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The Department of Ecology-facilitated [Stormwater Action Monitoring](#) (SAM) forum helps municipal stormwater permittees understand and develop water quality monitoring strategies required under Western Washington municipal stormwater permits. SAM provides structure, transparency, and accountability for permittees and stakeholders. The group also aims to improve stormwater management, reduce pollution, improve water quality, and reduce flooding.

The City of SeaTac meets Permit monitoring and assessment requirements by paying into an Ecology-managed collective fund that finances the following programs:

- Regional small streams and marine nearshore areas status and trends monitoring.
- Stormwater effectiveness and source identification studies.

## 12.0 REPORTING AND RECORDKEEPING REQUIREMENTS (S9)

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### 12.1 Annual Report

No later than March 31 of each year, the City of SeaTac submits an electronic Annual Report to Ecology's Water Quality Permitting Portal (WQWebPortal). The Annual Report covers activities performed during the previous calendar year. Each Annual Report includes the following:

- A copy of SeaTac's current *SWMP Plan*.
- As provided by Ecology, the Annual Report form documents SWMP Plan implementation status during the reporting period.
- Attachments including summaries, descriptions, reports, and other information as required, or as applicable.
- Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.

The City makes the most current Annual Report and SWMP Plan available on the [SeaTac Stormwater Management Program Webpage](#)

### 12.2 Recordkeeping Requirements

The City of SeaTac keeps all records related to the Permit and the SWMP for at least five years. All records related to the Permit and the SWMP are made available to the public at reasonable times during business hours. The City will provide a copy of the most recent Annual Report upon request to any individual or entity (a reasonable cost is charged for making photocopies of records). The City may require an advanced notice of intent for review of Permit-related records.