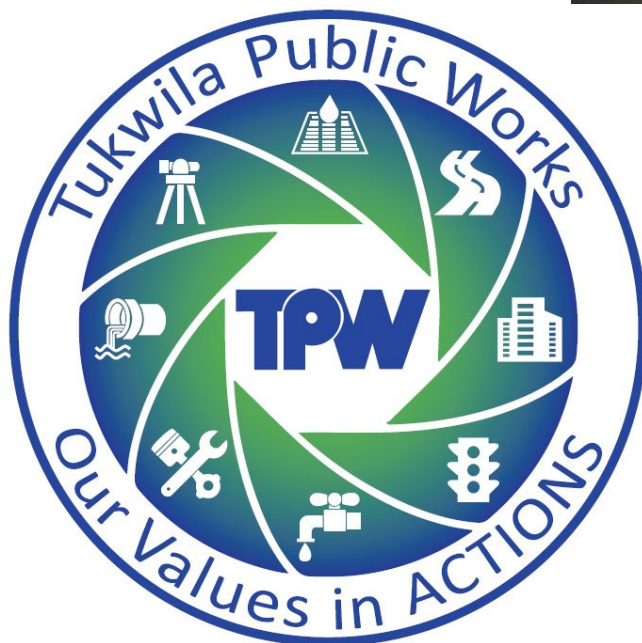




2023

Stormwater Management Program (SWMP)



City of Tukwila
Public Works

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FREQUENTLY USED ACRONYMS

AKART All known, available and reasonable methods of prevention, control, and treatment.

BMP Best Management Practice

EPA U.S. Environmental Protection Agency

KML Keyhole Markup Language

LID Low Impact Development

MEP Maximum Extent Practicable

MS4 Municipal Separate Storm Sewer System

NOI Notice of Intent

NPDES National Pollutant Discharge Elimination System

Permit Western Washington Phase II Municipal Stormwater Permit

SAM Stormwater Action Monitoring

SWMP Stormwater Management Program

TMDL Total Maximum Daily Load

INTRODUCTION

The City of Tukwila manages its stormwater drainage system (MS4) in compliance with the Western Washington Phase II Municipal Stormwater Permit. “Stormwater” is regulated under both the Federal Clean Water Act (CWA) and the State Water Pollution Control Act. Stormwater is defined in the permit as “runoff during and following precipitation and snowmelt events, including surface runoff, drainage or interflow”. Stormwater can become polluted when rain or snow meets human development like roads, parking lots and buildings, and can become polluted by activities such as illegal dumping, illicit stormwater connections or improper maintenance of stormwater systems. Most outside drains carry stormwater to local surface waters, like creeks and rivers, and ultimately flow into Puget Sound. Our permit requires us to reduce the discharge of stormwater to the “Maximum Extent Practicable”.

The Surface Water Management Program (SWMP) is targeted at reducing stormwater pollution generated from all lands owned and operated by the City of Tukwila, including rights-of-way, parks, and all other facilities. Managing stormwater and meeting permit requirements is reliant on enacting operational and structural best management practices. This is termed AKART or *All Known, Available and Reasonable methods of prevention, control, and Treatment*. When we find a better way of working that reduces pollution and meets the many other factors to consider, like cost, we include those new efforts. This is known as adaptive management.

The City provides an Annual Report for the previous year’s activities that documents adaptive management efforts. Both current and past annual reports and SWMPs are on the City’s website at: <https://www.tukwilawa.gov/departments/public-works/npdes/>

STORMWATER MANAGEMENT PROGRAM COMPONENTS

The Permit has the following program components:

- Stormwater Planning
- Public Education and Outreach
- Public Involvement and Participation
- MS4 Mapping and Documentation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from New and Redevelopment, and Construction Sites
- Operations and Maintenance
- Source Control Program for Existing Development

In addition to the SWMP components, the Permit contains special conditions covering:

- Total Maximum Daily Load Requirements
- Monitoring and Assessment
- Reporting Requirements

STORMWATER PLANNING

OVERVIEW

City-wide stormwater management planning requires the participation of many departments within the city and the skills of many individuals. These professionals are brought together to determine how to improve the quality of water entering and leaving through the MS4.

ON-GOING ACTIVITIES

- An inter-disciplinary committee assists in the development and implementation of the Stormwater Program.
- Coordination with the long-range comprehensive plans for land use, transportation and utilities to include discharge elimination system efforts.
- Coordination with the Stormwater Management Action Plan (SMAP), which developed an inventory of stormwater basins, conducted a receiving waters assessment, and developed a receiving water prioritization. The Riverton Creek basin was selected as the priority watershed on which to focus water quality improvement efforts.
- Weekly during development review meetings recommend and require pollution prevention BMPs for all construction activities.
 - LID BMPs are required to be the first option until proven infeasible by the applicant.

PLANNED ACTIVITIES 2023

- Updating the long-range Surface Water Comprehensive Plan.
- Reviewing Municipal Code Title 14 for escalating enforcement capability and legality.
- Begin implementing the developed SMAP.
- Conduct complete internal audit of all program components.
- Reengage the Interdisciplinary team to introduce new members.

Public Education and Outreach

OVERVIEW

The city's public education and outreach efforts focus on business owners and landowners with significant stormwater management systems connected to the MS4.

ON-GOING ACTIVITIES

We Identify and interact with target audiences at various times and in various ways with stormwater protection messages and technical assistance:

- Private and public drainage system inspection programs
- Stormwater Management Program Plan review through Council
- Instructional posters in English and Spanish
- Suds Free Car Wash Kit for charity fund raising events
- GovTV Ch 21, Constant Contact email blasts and Survey Hero
- Backyard Wildlife Festival and Touch a Truck Event

To affect behavior change, the City promotes the BMPs contained in the King County Surface Water Pollution prevention manual through escalating enforcement efforts beginning with discharge response and control and leading to documentation of communication of requirements to clean up and change polluting behaviors.

PLANNED ACTIVITIES 2023

- Partner with Puget Sound Starts Here campaign.
- The City will use social marketing tools such as Twitter/Facebook etc.
- Conduct Dumpster Outreach regional campaign.

BEHAVIORAL CHANGE EFFECTIVENESS

The City hired a consultant to conduct an online survey with an outcome of Community Stormwater research findings. The objectives were to research and measure citizens general knowledge of the following:

- Perception of stormwater quality and stormwater runoff issues
- Major causes of stormwater pollution
- Prevalence of Vehicle maintenance, automotive fluid leaks and washing
- Uses of Pesticides, herbicides, fertilizers, and chemical treatments
- LID and Pervious pavements and Rain garden use and maintenance.
- Cost of protecting our neighborhood streams, rivers, and Puget Sound

STEWARDSHIP OPPORTUNITIES

Continue stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities.

ON-GOING ACTIVITIES:

- Storm drainage marker program for public and private properties.
- Partner with Forterra, Student Conservation Association, Dirt Corps, King Conservation District, Duwamish Alive Coalition, King County Parks, Partner in Employment, resident-based community groups, and volunteers to provide stewardship and restoration activities in Tukwila's parks and shoreline areas.
- Green Tukwila 20-year Stewardship Plan to provide a strategy for active restoration and management of public land.

PLANNED ACTIVITIES 2023

- Conduct the Dumpster Outreach program effort with assistance from solid waste.
- Send out informational emails and/or post cards to multi-family, commercial and industrial property owners that requests survey participation for information gathering and educational purposes.
- Promote stewardship opportunities at sponsored public events such as Backyard Wildlife festival, Touch a Truck and Our Green Duwamish events.

PUBLIC INVOLVEMENT AND PARTICIPATION

OVERVIEW

ON-GOING ACTIVITIES

- The public is invited to all City Council, Committee of the Whole, and Transportation and Infrastructure Committee meetings where input on NPDES Phase II Permit related topics is accepted.
- Provide notices of upcoming workshops to solicit public input, on the City's NPDES website, and City calendar. In addition, when appropriate, notices will be posted at strategic locations such as City Hall, Public Works, Community Development and at the Tukwila Community Center.
- The City maintains the most current SWMP Plan and Annual Report on its NPDES website. All other submittals are available to the public upon request.

PLANNED ACTIVITIES 2023

- Upload the 2022 Annual Report and the 2023 SWMP Plan to the website.
- Upload the 2022 SMAP to the website.
- Provide opportunities for public input to updating the Surface Water Comprehensive Plan.

MS4 MAPPING AND DOCUMENTATION

OVERVIEW

Our mapping continues to evolve and is used by developers, capital improvement projects, for tracing illicit discharges and maintenance and operations.

ON-GOING ACTIVITIES

- We completed mapping of outfalls, discharge points and related permit requirements and will continue to update our GIS mapping as new drainage systems are constructed and/or discovered.
- We have identified and mapped size and material of most known MS4 outfalls and will routinely do so if new outfalls are discovered and/or installed.
- As new development occurs, the City will map storm drains that connect to the City's storm drainage infrastructure.
- We use ESRI GIS mapping in electronic format and make available to Ecology, Tribes, other jurisdictions, and the public that have a business need as requested and in accordance with national security rules pertaining to public infrastructure safety.

PLANNED ACTIVITIES 2023

- We will update the electronic mapping of newly discovered drainage systems, MS4 outfalls and stormwater treatment and flow control facilities.
- We will continue mapping connections of private storm drainage systems to the City's MS4 as new connections are made. This includes mapping previously made connections identified during routine maintenance activities.

- The City will be creating a new position called, “GIS Field Technician and Asset Manager” who will help to field locate existing and forthcoming public stormwater assets and help to update GIS mapping with the goal of having a more accurate, responsive and up-to-date GIS system.

ILLICIT DISCHARGE DETECTION AND ELIMINATION

OVERVIEW

We use the Department of Ecology IDDE Manual to prevent, detect, characterize, trace and, eliminate illicit discharges and illicit connections to the MS4 and ultimately the waterbodies of the state and the United States.

ON-GOING ACTIVITIES

We have an ongoing IDDE program that includes reporting illicit discharges and spills and taking corrective actions per established procedures. We screen for IDDE through typical maintenance and operations of catch basins, water quality, flow control structures, storm drainage cleaning, and during video inspection. Employees are trained and very knowledgeable with inspection of storm drainage facilities under construction, catch basin inspection program for commercial properties and, responding to reported illicit discharges.

- Tukwila’s Municipal Code – Title 14.30.180 is the regulatory mechanism used to prohibit and enforce non-stormwater and illicit discharges to the City’s MS4.
- The City typically screens greater than 20% of its MS4 which exceeds the required minimum 12%. Staff use the *Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual* and responds to illicit discharges and spills as reported to the City spill reporting hotline number, 206-433-1860 and Ecology’s Environmental Report Tracking System (ERTS). Follow up to these events is conducted as needed.
- The City has an established IDDE program which uses visual inspections, video detection and when discharges are discovered, immediate evaluation is conducted, and appropriate containment is implemented. Investigation of the source is conducted, notification and education are then given to the responsible party and follow up and enforcement initiated when necessary.
- Appropriate training is provided to City employees, in particular field staff. Training of new hires are conducted using previous training materials until their training is up to date.

PLANNED ACTIVITIES 2023

- We will continue to implement its IDDE program. In addition, will review its IDDE program to determine if any updating should occur.
- The city hired new maintenance employees and two (2) new Environmental Compliance Inspectors. We are training these new employees in our program.

CONTROLLING RUNOFF FROM NEW AND REDEVELOPMENT, AND CONSTRUCTION SITES

OVERVIEW

The City's development review and inspection staff has a process in place to address new development, redevelopment, and construction sites. The main purpose is to reduce pollutants in stormwater runoff to a regulated MS4 before, during and after construction.

ON-GOING ACTIVITIES

- We adopted by ordinance the *2021 KCSWDM* June 30, 2022. This manual is the equivalent to the Washington State Department of Ecology *2019 Stormwater Management Manual for Western Washington (2019 SMMWW)* and includes the Pollution Prevention Manual for Construction sites.
- The City will review its permitting process and make any necessary changes to ensure compliance with the Phase II Permit.

PLANNED ACTIVITIES 2023

- Develop an addendum manual for Development Review Engineers to better implement Low Impact Development, Operations and Maintenance agreements and Franchise Utility through permitting tools to ensure compliance with the KCSWDM.
- Train staff on new review manuals.
- Implement detailed inspection and review procedures.

OPERATIONS AND MAINTENANCE

OVERVIEW

The City has implemented an operations and maintenance (O&M) program that is made up of, surface water and sewer, water, and streets divisions. Maintenance activities of city owned stormwater facilities are required to be documented and are primarily addressed by the responsible City Departments and supported by the facilities, sewer, water, and street departments when needed. The goal is to prevent or reduce stormwater impacts.

ON-GOING ACTIVITIES

- Conducted annual inspections of City owned stormwater facilities and all lands owned and operated for maintenance of storm drainage facilities and source control.
- Inspections of critical sites occur after 10 year/24 hour storms.
- Maintenance personnel conduct stormwater inspection of cb's on a zoned basis. Required maintenance is tracked on a work order, with drainage structure in need of extensive repairs are listed on the City's drainage repair program.
- The City has developed a SWPPP for each of its maintenance and storage yards that is reviewed annually. Records of routine inspections of these facilities and their BMPs are documented in Lucity.

PLANNED ACTIVITIES 2023

- New facilities SWPPP's will be developed and existing SWPPP's updated.
- Training will be conducted this year for existing and newly hired maintenance personnel.
- Circuit basis inspections to be implemented with new mapping tools and Lucity program.

SOURCE CONTROL FOR EXISTING DEVELOPMENT

OVERVIEW

The Source Control Program (SCP) for Existing Development is a new permit requirement to be part of the City's Stormwater Management Program Plan.

ON-GOING ACTIVITIES

- The City adopted a Source Control Code in TMC. 14.30 Surface Water Management.
- Identified and create an inventory of businesses based on Appendix 8 NAICS code.
- Created inspection tracking within database Community Development.
- Hired one new inspector to assist in Business Source Control Program.

PLANNED ACTIVITIES 2023

- Train new inspectors and begin mailing Business Source Control inspection notices.
- Source new database software to assist in communications and inspection documentation.
- Develop and conduct FOG program to eliminate sewage overflows to surface waters.

COMPLIANCE WITH TOTAL MAXIMUM DAILY LOADS

A TMDL has not been established for the City of Tukwila receiving waters at this time, consequently no action needed at this time.

MONITORING AND ASSESSMENT

ON-GOING ACTIVITIES

- The City committed in 2019 to pay into the collective SAM monitoring fund.
- Annual contribution amounts for next five years:
S8.A – Regional Status and Trends Monitoring, the City will pay **\$3,252**.
S8.B – Stormwater Management Program (SWMP) Effectiveness and Source Identification Studies, the City will pay **\$5,943**. The **total fee of \$9,195** is due each year by August 15 until the permit expiration date of July 31, 2024.

PLANNED ACTIVITIES 2023

- Continue to make payments to Ecology in support of the SAM program.
- Review the opportunities to conduct monitoring internally to develop Tukwila-specific water quality program adjustments.

REPORTING REQUIREMENTS (SPECIAL CONDITION S9)

OVERVIEW

The City must and does meet reporting, submittal, and signatory authority requirements.

ON-GOING AND PLANNED ACTIVITIES

- Prepare and submit the Annual Report by March 31st.
- Attach SWMP Plan, required summaries, descriptions, reports, and other information.
- Meet certification and signature submittal requirements.

CONCLUSION

The current Permit expires July 31, 2024. This SWMP Plan is a working document with updates annually until the expiration date.

Additional information on the City's NPDES program can be found online at <https://www.tukwilawa.gov/departments/public-works/npdes/>

The public is encouraged to participate in the development of the SWMP Plan. Please contact Russell Betteridge of the City of Tukwila's Public Works Department with questions or comments at:

Mail: Russell Betteridge, CSM
NPDES Coordinator
Department of Public Works
City of Tukwila
6300 Southcenter Blvd, Suite 200
Tukwila, WA 98188-8548

Phone: 206-433-7195

Email: russell.betteridge@tukwilawa.gov

Website: <https://www.tukwilawa.gov/departments/public-works/npdes/>