

**DRAFT**



2023

# Stormwater Management Program Plan (SWMP Plan)

*A new stormwater program to support the Hall Creek Stormwater Management Action Plan will launch in 2023.*



*Compliance with NPDES Western Washington Phase II Municipal Stormwater Permit #WAR045531*

**City of Mountlake Terrace**

This page is intentionally blank.

## Introduction

This document has been created to comply with requirements found in the Western Washington Phase II Municipal Stormwater Permit (also known as the National Pollution Discharge Elimination System, or NPDES Permit), which is part of the Federal Clean Water Act. The NPDES Permit requires that the city produce a Stormwater Management Program Plan (SWMP) annually, and update it regularly as needed to reflect Mountlake Terrace's actions and planned actions in meeting permit requirements. A draft copy of the current year's SWMP Plan is submitted along with the city's annual report to Ecology by March 31 each year. The final version, along with the annual report, is posted on the city's website by May 31 of each year. The current NPDES permit cycle started August 1, 2019 and expires July 31, 2024.

Mountlake Terrace's 2023 SWMP describes actions the city plans to take this year to prevent or reduce the discharge of pollutants from the city's stormwater system into local creeks and lakes.

This plan is primarily about water quality and stormwater permit compliance. Flood prevention and other capital improvements are covered in the city's [Comprehensive Stormwater Plan](#)

This document only includes actions required by the NPDES permit. The City may well take other actions to further the goal of protecting the environment from stormwater contamination but those are not discussed here.

## Document Organization

This document is organized by program component according to the following sections. Each section follows the numbering and naming convention of the permit. The narrative for each section contains a brief summary of the goal of that section. Next is a description of actions the city has implemented, or will implement, to meet these requirements.

To review the original permit language in comparison to what Mountlake Terrace has designed in response, please see the [Western Washington Phase II Municipal Stormwater Permit](#).

The nine chapters of this plan match the requirements of the 2019 Ecology permit for the city. These chapters are:

1. Authorized Discharges (Underground Injection Control Well Management)<sup>1</sup>
2. Stormwater Planning
3. Public Education and Outreach
4. Public Involvement and Participation
5. MS4 Mapping and Documentation
6. Illicit Discharge Detection and Elimination
7. Controlling Runoff from Development and Redevelopment projects
8. Municipal Operations and Maintenance
9. Source Control for Existing Development

---

<sup>1</sup>The underground injection control well management portion of this SWMP is authorized by [WAC 173-218](#).

## Section 2.A – Authorized Discharges

The Underground Injection Control (UIC) Well program rule, Chapter 173-218 WAC, is the regulatory authority for UIC wells in Washington. As required, the five privately-owned infiltration facilities known to the city have been notified that they must register their UICs with Ecology. In addition, there is one municipal stormwater infiltration facility (Town Center Regional Infiltration Facility, constructed in 2014) which is also a UIC well, as it is an underground perforated pipe infiltration system with an overflow to the municipal stormwater system. This facility is located under the city's library parking lot, and is part of the Mountlake Terrace Civic Campus. The Town Center Regional Infiltration UIC has been registered and has received notification from Ecology that it has been authorized by UIC program rule, using the presumptive approach.

The strategy being used to protect groundwater quality in the collection area for the Town Center Facility is the application of All Known, Available, and Reasonable methods of prevention, control and Treatment (AKART). For the Town Center UIC contributing area in Mountlake Terrace, AKART means the application of source control BMPs for any potential pollutants, implementation of the city's illicit discharge detection and elimination program as described in sections S5.C.5.b and d, and public outreach/education regarding proper disposal of pet waste. The Town Center Regional Infiltration Facility and connected pre-treatment system are inspected annually, and are operated and maintained according to the standards in the 2019 Stormwater Manual for Western Washington.

## Section 5.C.1 – Stormwater Planning

Mountlake Terrace is working to protect and restore local creeks and lakes with a basin-level stormwater improvement approach. While the city has carried out basin planning in prior years, the 2019-2024 permit requires the city to evaluate the two largest basins in the city (McAleer Creek and Lyons Creek) and plan/schedule/budget water quality improvements within one basin by 2024.

### **S5.C.1.a: Interdisciplinary Team**

An interdisciplinary city team was assembled in 2020 to support the watershed planning process, including participants from Public Works, Community and Economic Development, Engineering, Transportation, and GIS. In 2022, a watershed inventory, public outreach/input process, and watershed prioritization analysis were completed in-house. As a result of these efforts, Hall Creek basin was selected as the highest priority drainage basin for Mountlake Terrace. In March 2023, with the assistance of a consulting team from Osborn Consulting, the team will submit a Stormwater Management Action Plan (SMAP) for Hall Creek basin.

Mountlake Terrace also leads two watershed-based multi-jurisdictional teams; the long-standing Lake Ballinger-McAleer Creek Forum (consisting of Mountlake Terrace, Edmonds, Shoreline, and Lake Forest Park), and a more recently-formed team for the Lyon Creek watershed (consisting of Shoreline, Mountlake Terrace, Lake Forest Park and Brier.) These teams meet regularly to discuss issues of mutual concern within these watersheds, including basin planning efforts.

#### **S5.C.1.b: Coordination with Long-Range Plan Updates**

In 2023, staff will procure a consultant to help prepare the 2024 update to the city's Comprehensive Plan and Stormwater Comprehensive Plan, including new strategies and city practices and policies to protect and improve surface water quality in the city. The process will include consideration of modifications to the Comprehensive Plan for Mountlake Terrace to meet the city's water quality goals. In 2022, the city funded a hydrologic and hydraulic study of Hall Creek. The study will focus on how to reduce flooding and increase fish passage from Hall Lake to Lake Ballinger. The information collected will serve as an input for the city's 2024 Comprehensive Plan, the 2024 Stormwater Management Action Plan for one basin or sub-basin, and the 2024 Stormwater Comprehensive Plan Update.

#### **S5.C.1.c: Low Impact Development (LID) Code Requirements**

New engineering specifications containing several LID BMPs were adopted by the city in the summer of 2021. In November 2021, the city's stormwater code was updated to (among other objectives) further facilitate use of LID as the preferred approach to development through the following changes: a section of non-compliant code pertaining to LID application in the Town Center was removed; conditions under which an adjustment or variance to the stormwater minimum requirements would be granted was synced to the 2019 NPDES permit; and the 2019 Stormwater Manual for Western Washington was formally adopted by the city. This new stormwater code was adopted by Mountlake Terrace effective May 30, 2022, and is available to the public through the municipal code website. Guidance to developers regarding LID, including LID checklists, supporting documentation, and any other documents required to explain how to implement LID as the preferred approach to development in Mountlake Terrace were updated and posted to city web pages in 2022.

#### **S5.C.1.d Stormwater Management Action Planning (SMAP)**

Three candidate drainage basins were selected for SMAP analysis: Hall, McAleer, and Lyon Creeks. These basins were selected based on the criteria outlined in the watershed planning guidance from Ecology. In partnership with Snohomish Conservation District (SCD), the city hosted a May 2022 webinar to share watershed analysis results for McAleer and Lyons basins and to gather feedback from interested stakeholders and residents regarding basin selection for the 2023 action plan. Feedback was collected via flash polls and comments during the webinar from 15 attendees. The webinar was recorded to allow for additional feedback collection over the following month.

In 2023, efforts will be focused around the writing and delivery of the Hall Creek basin SMAP document, and the subsequent implementation of stormwater management actions in the plan.

### **Section 5.C.2 - Public Education and Outreach**

Mountlake Terrace works hard each year to provide stormwater education and outreach to build general awareness on how to reduce stormwater pollution, effect positive behavior change, and create stewardship opportunities.

### **S5.C.2.a and b, S5.C.5.b Targeted Stormwater Outreach**

In 2023, Mountlake Terrace will implement the following outreach activities providing targeted stormwater protection programs to the public:

1. *Dumpster outreach campaign.* The “Close Your Dumpster” outreach behavior change program, piloted on a regional basis in 2021, will be expanded to a larger number of business participants through source control inspections in 2023. Along with several other cities in the area, Mountlake Terrace worked on a regional behavior change pilot effort centering on keeping dumpsters closed, preventing dumpster leachate from ending up in local creeks and lakes. Results from the regional pilot evaluation were used to optimize the behavior change approach. The pilot outreach was successful in getting businesses to change behavior around closing dumpsters. As part of the source control inspection program, businesses where dumpsters are regularly left open will be identified and encouraged to change behavior using methods that were found to be effective through the pilot. Pre- and post- dumpster lid monitoring will be used to evaluate the campaign’s effectiveness.
2. *Student environmental education.* Mountlake Terrace will continue to work with Snohomish Conservation District (SCD) to deliver pollution-prevention education to school-age children. SCD lesson plans focus on the importance of protecting stormwater from pollutants, creek ecology, and basic water quality principles. In 2023, Mountlake Terrace and SCD will again host a summer outdoor educational event for kids.
3. *Low impact development outreach to engineers, contractors, developers, residents, and planners.* The city will continue in-person and remote outreach to the above audience with information on how to protect local creeks and lakes from construction runoff using low impact development principles and BMPs. In 2021, the city’s development permitting process went fully on-line; in 2022, all development guidance documents on the city website were updated to reflect the use of the 2019 stormwater manual.
4. *Pet waste pollution prevention.* Signs encouraging proper pet waste disposal will continue to be posted near dog parks and other high traffic dog walker locations. Signs that are removed or defaced have been and will continue to be replaced. The city also periodically issues social media posts, press releases, and other public outreach messaging regarding proper pet waste disposal.
5. *Mobile cleaning outreach (best management practices for wash water by mobile businesses such as carpet cleaners, vehicle washers/detailers, power/pressure washers, and pet care services.)* City staff make a special effort to reach this difficult-to-reach target audience. An MLT-specific mobile business BMP brochure has been developed, and outreach to mobile cleaners as a joint project of the building inspection and stormwater programs is implemented as needed to address problems.
6. *Proper disposal of hazardous chemicals for residents and businesses.* Mountlake Terrace is primarily a residential city, so the stormwater program prioritizes public education for homeowners and renters. The city regularly posts information to residents on social media regarding proper disposal of specific pollutants (paint, oils, sediment, soap, vehicle fluids, etc.) This message is also communicated through the quarterly newsletter sent to all homes in Mountlake Terrace “City Happenings” and via the city website, as well as through Facebook, Twitter, and other forms of social media. In 2023, as part of source control outreach and

inspection activities with businesses, the city will provide information to businesses on where they can safely dispose of small quantities of chemicals or other hazardous wastes.

### **S5.C.2.a.iii Creating Stewardship Opportunities**

City stewardship opportunities and/or partnerships with existing organizations give residents the opportunity to volunteer, including citizen scientist monitoring, storm drain marking, invasive plant removal/native planting events, and Trees for Terrace street tree stewardship. In 2023, the city will continue to partner with other organizations such as the Mountlake Terrace Parks Department, the Boy and Girl Scouts, the Whale Scouts, and Snohomish Conservation District to control the spread of invasive plants in city parks. Mountlake Terrace and Edmonds jointly fund a volunteer water quality monitoring program for Lake Ballinger, supported by Snohomish County.

In 2023 (pending the availability of grant funding) the city is planning to distribute and plant free street trees to residents who agree to water the trees over two summers. The new program, Trees for Terrace, received a small grant (\$23,000) to launch a volunteer street tree program. Criteria for street tree distribution prioritization has been developed. The three criteria are: 1. Low Tree Equity score, defined as a score of less than 75 for a neighborhood block group from the Tree Equity website report for Mountlake Terrace; within ¼ mile of a highway (Hwy 99 or I-5); and location within Mountlake Terrace’s high priority watershed (Hall Creek drainage basin. To determine who gets free trees first, the criteria is then applied to a GIS map. Areas of the city positive for all 3 criteria become Tier 1 (1<sup>st</sup> priority for free tree distribution, and also the areas of the city targeted for enhanced public outreach to encourage program participation.) Areas of the city positive for 2 criteria are Tier 2, areas of the city positive for 1 criteria are Tier 3, and areas that are unaffected by any of the criteria are Tier 4. In 2023, program participants will have access to a new interactive GIS map indicating the location of overhead and underground utilities, to prevent trees from being planted in a location where their roots could cause damage or require unhealthy trimming of trees due to overhead wires.



*Funding to support this project was provided by the State of Washington Department of Natural Resources Urban and Community Forestry Program*

The city also manages a stormwater-specific stewardship opportunity, Adopt-A-Drain. Residents “adopt” a local drain and keep it clear of debris, leaves, and garbage. The goal is to keep surface water clean, reduce the threat of localized flooding, and to provide an “early warning system” for any pollutant spills near adopted drains. There are currently 139 adopted drains in Mountlake Terrace maintained by 20 drain stewards, including the Mayor and two City Council members. Stewardship opportunities are publicized through City Happenings Newsletter, city council materials, city manager’s update, email blasts, door hangers, news releases, Facebook, Twitter, and on the city website.



### Section 5.C.3 - Public Involvement and Participation

The city provides multiple options to provide input into the development of this plan and other initiatives designed to improve water quality.

#### **S5.C.3 Involving the Public in the SWMP**

The city annually invites the public to review and comment on the draft of the city's Stormwater Management Program Plan (SWMP Plan) on the city's website home page ([www.mltwa.com](http://www.mltwa.com)), before it is finalized in May. The new draft SWMP for the year is publicized using a social media "blast" and a press release to the local online newspaper, MLT News. Comments from the public are welcomed at any time throughout the year, and the stormwater program manager's phone number and email are posted on the city website. Residents are also encouraged to participate in the Ballinger Watershed Forum, a coalition made up of elected officials, staff, and residents from Shoreline, Lake Forest Park, Edmonds, and Mountlake Terrace. The public has input to other stormwater management-related decisions through the biennial budgeting process and through the development of the 6-year and 20-year stormwater management capital improvement plan. All City Council and Planning Commission meetings are open to the public to encourage participation, and the schedule is posted on the city website before meetings.

Creating more opportunities for public involvement from overburdened communities is a priority in Mountlake Terrace. People for whom English is not their first language can receive interpretation from a list over the phone, at the permit counter, or in the field. Languages available for interpretation are: Arabic, Burmese, Cambodian, Chinese, Farsi, Hmong, Korean, Laotian, Marshallese, Nepalese, Punjabi, Romanian, Russian, Somali, Spanish, Swahili, Tagalog, Tigrigna, and Vietnamese. The city website can be translated into 108 languages via Google Translate (translation widget pops up whenever the city website is opened.)

### Section 5.C.4 – MS4 Mapping and Documentation

#### **S5.C.4 Municipal Stormwater Mapping and Documentation**

The city has an electronic mapping system (ArcGIS ArcMap) for the stormwater system which is continually updated and maintained. Updating and managing this mapping system is performed according to documented procedures and quality control standards. The city's GIS system has been internally audited to ensure that the system complies with Ecology requirements for stormwater infrastructure mapping. Known outfalls have been documented along with outfall characteristics including conveyance type, pipe diameter, and pipe material. Receiving waters, including creeks and lakes, have been mapped and identified. Stormwater treatment and flow control BMPs/facilities owned by the city are mapped and new facilities are added to the mapping system as needed. All geographic areas served by the city's stormwater system are mapped (whether or not they discharge stormwater to surface waters.) All known connections between the city's stormwater system and private property or other municipalities are identified in GIS. The city updates pipe size and material during the normal course of business. When changes to the stormwater system are completed or mapping errors detected, that information is provided back to the GIS specialist, who updates the mapping system. Upon request, the city makes all requested mapping information available to Ecology, tribes, municipalities, and other Permittees.



## Section 5.C.5 - Illicit Discharge Detection and Elimination (IDDE)

The city seeks to prevent, detect, characterize, trace, and eliminate all illicit discharges and connections in the municipal stormwater system.

### **S5.C.5.c Water Pollution Prevention Ordinance**

[Mountlake Terrace Municipal Code \(MTMC\) Chapter 16.21, Illicit Discharge Detection and Elimination and Operation, Maintenance, and Inspection of Storm Drain Facilities](#) authorizes the IDDE program and meets the regulatory requirements specified in Mountlake Terrace's NPDES permit. In the majority of cases, the city works to enforce this code using education and technical assistance to seek voluntary compliance. The procedure for voluntary correction is outlined in [MTMC Section 16.21.110](#). Required documentation includes a description of the violation, including location; the necessary corrective action which must take place by a certain date or time; and consequences for inaction. If voluntary compliance is not effective, response is escalated as necessary to stop the polluting activity. Enforcement procedures can escalate to a Notice of Civil Violation under the terms outlined in this section of city code. If further actions are needed, the city has the power to bring violators before the city's Hearing Examiner. Appeals are also heard by the Hearing Examiner.

### **S5.C.5.b and d IDDE Program efforts to detect non-stormwater discharges and Illicit Connections**

*Field screening.* In 2023, the city will continue to field-screen stream and lake outfalls during the summer dry season to detect and eliminate any illicit connections to Mountlake Terrace creeks and Lake Ballinger.

*Public works municipal stormwater facility inspections.* During regularly-scheduled inspections for catch basins, flow control structures, and other stormwater facilities, city stormwater crews check for evidence of illegal dumping or illicit connections. If pollutants are found, the crew is trained to immediately notify their supervisor or the stormwater program manager, who then becomes the lead on the IDDE investigation, follow-up, and any remedial action.

*Spill hotline.* The city responds to and investigates all calls on illegal dumping, spills, illicit discharges, and illicit connections, including calls received through the city's hotline. The hotline allows citizens to report illicit discharges or illicit dumping within city limits. The hotline phone number is (425) 670-8264. During the hours of 8 AM to 5 PM Monday through Friday, the hotline is managed by Public Works. Outside of these hours, spills are referred to 911, and are routed to on-call operations and maintenance staff through SNOCOM or Mountlake Terrace's police dispatch. All hotline calls are documented and receive follow-up. The hotline is listed prominently in several locations on the city's website and regularly promoted through city newsletters and other typical outlets for information to the public.

### **S5.C.5.e Implement a program to address illicit discharges**

The Stormwater Program Manager coordinates the city's IDDE program, including investigation of all complaints regarding illegal dumping, illicit discharges, and cross-connections. [MTMC 16.21.050](#) clearly defines what constitutes an illicit discharge, as well as the responsibility of private property owners or the city to clean up any spills. All city vehicles contain a spill response kit, and staff are regularly trained on how to respond to a spill (what to do, who to notify, and how to report a spill.) Staff follow the detection and identification procedures as described and documented in the *Illicit Connection and Illicit*

*Discharge Field Screening and Source Tracing Guidance Manual* (Herrera Environmental Consultants, Inc., May 2020 Revision.)

City spill response procedures cover the characterization, tracing, elimination, and reporting of illicit discharges. The stormwater program manager has primary responsibility to prevent and investigate illicit discharges, but two other MLT staff are also trained spill coordinators and can serve as first responders for spills. Upon notification of a spill, Public Works employees are immediately mobilized to the site to contain and clean up the spill. After hours, spill calls are routed to on-call O&M field staff through emergency dispatch. Whenever possible, the spill or illicit discharge is prevented from reaching the stormwater system. If the spill has already reached the stormwater system, material is removed using vacuor trucks, booms, absorbent pads, or other spill response measures appropriate to the type of material spilled. For large events, field staff have access to extra spill response supplies stored in the spill response trailer, parked at the Public Works facility and available 24 hours a day. Spill trailer contents are periodically inventoried and restocked.

City staff educate the public about the hazards of spills and improper waste disposal through business inspections, spill response site visits, inspections, one-on-one interactions, educational displays during summer festivals, and through articles in the city newsletter (City Happenings) and the city website.

#### **S5.C.5.f IDDE Staff Training**

City staff (building inspectors, construction inspectors, code enforcement staff, administrative staff, land use planners, and Fire personnel) receive regular training on identification of spills and reporting from the stormwater program manager. Support materials, including spill response flow charts, spill on-call procedures, Environmental Incident Response forms, and IDDE training presentations are made available to those who typically respond to spills. Field crews receive enhanced hands-on training for typical utility spill response (sewer overflow, water line break, other), as well as training on identification and response to other spills that they may encounter in the course of their normal field duties.

#### **S5.C.5.g Program Recordkeeping**

The city maintains records on trainings, staff trained, ERTS reports, S4.F.1 letters, and IDDE investigations. Since 2020, IDDE investigations have been tracked using the Ecology WQWebIDDE online system. Records kept include Ecology notifications, incident response, the time elapsed for the response, and how issues are resolved. Additional information, including notes, enforcement actions, compliance agreements, and photos are stored in separate files by site. Training presentations are updated regularly. Staff trainings are documented through dated sign-in sheets.

### **Section 5.C.6 - Controlling Runoff from New Development, Redevelopment and Construction Sites**

Development and redevelopment activities, if not carried out carefully, can negatively impact on the health of regional lakes, waterways, and Puget Sound. The city reviews development plans, inspects development sites during construction, and monitors public and private stormwater system infrastructure to ensure facilities are maintained and functional. The use of Low Impact Development (LID) BMPs for development and redevelopment is the common and preferred approach.

### **S5.C.6.a and b Develop Stormwater Management Standards for Development, Redevelopment, and Construction Sites**

An LID ordinance updating Mountlake Terrace code to meet new requirements was passed unanimously by city council May 20<sup>th</sup> 2018. In 2021, the city adopted new engineering standard plans to facilitate the use of LID designs for several LID-specific designs, including permeable pavement, bioretention planters, and reverse slope sidewalk, along with other types of infiltration structures. These standards were updated in 2022, and are expected to be updated in 2023. Drainage easements are required between private systems and the approved point of discharge (MTMC 16.20.170). These required easements “shall provide for the perpetual access of the city for maintenance, alteration, repair, and replacement of drainage-related facilities.”

### **S5.C.6.c Review and Inspect Development/Redevelopment Projects**

The Mountlake Terrace Municipal Code (MTMC) [Chapter 16.20, Stormwater](#), covers stormwater management for permitting and construction inspection in Mountlake Terrace. MTMC 16.20 was updated in 2010, 2016, and 2018 to include all stormwater Minimum Requirements and associated definitions required by the 2013-2019 NPDES permit and the permit’s Appendix 1. The *2019 Department of Ecology Stormwater Management Manual of Western Washington* was adopted by the City Council as of November 2021, and use of this manual by the city became effective May 30<sup>th</sup> 2022.

The city has a permitting process with civil/site plan review and approval process, inspection, and enforcement to meet standards established by S5.C.4b for all new and redeveloped sites meeting hard surface area thresholds in Appendix 1 of the NPDES permit. This oversight occurs in phases: at pre-application meetings; during land use application review; during civil review; during pre-construction meetings; during construction site inspections; and at post-construction (as part of the stormwater infrastructure acceptance inspection.)

Private development plans are reviewed for compliance with Mountlake Terrace’s engineering standards, stormwater code, and Permit requirements. Public projects are subject to the same review process as private projects.

All construction sites (of any size) are required to have a stormwater pollution prevention plan (SWPPP.) This requirement is enforced by the stormwater program manager as well as the construction and building inspectors. All land use and civil permit applications that involve more than 2,000 square feet of new or replaced hard surface or 7,000 square feet or more of land-disturbing activity must be reviewed and approved by the Mountlake Terrace stormwater program manager.

Once the city has accepted a development plan to control erosion, runoff, and other potential construction impacts, prior to extensive clearing and construction, city staff inspect the site to ensure that the proper temporary erosion and sediment control (TESC) best management measures are properly placed and installed correctly.

During construction, the city conducts frequent inspections at the worksite. Typically these occur more than once a week when utilities are being constructed, and before, during, and after major rain events to ensure proper implementation and maintenance of TESC best management practices. Mountlake

Terrace construction inspectors have the authority to enforce [MTMC 16.20](#) and [MTMC 16.21](#), including corrective action notices and stop work orders.

The city's construction inspector inspects permanent 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 is stopped and the site is fully stabilized.) If any maintenance needs are identified, the developer is required to comply with the maintenance standards established for the site.

After construction, the city again inspects stormwater facilities. If any maintenance of the stormwater system is required, the city requires the contractor to carry out the needed maintenance. Once all the work has been completed, and the post-construction inspection has been completed, the city accepts the project. All stormwater infrastructure, including runoff treatment and flow control facilities, are inspected post-construction one year after acceptance, to release warranty bonds. At that time, any needed maintenance must be completed before the warranty bond is released. Following this step, sites are added to the private stormwater system inspection list, and are inspected annually.

[MTMC 16.21.100](#), Post-construction inspection, authorizes the Director to administer an inspection program for public and private stormwater facilities in the city. It also references the minimum maintenance standards described in the Stormwater Manual. This chapter authorizes the city to inspect stormwater facilities to determine compliance with the provisions of this chapter. Procedures are in place to allow access to the facility for inspection in the event the owner is not available. If the facilities are not being maintained in accordance with the minimum standards in the city's adopted stormwater manual, then the city may require that the "current holder(s) of right title or interest in the property where said facilities are located shall restore them to where they again function and operate in accordance with the approved drainage plan or the Stormwater Manual." The timeline to complete any corrective actions is codified in this chapter.

#### **S5.C.6.d Notice of Intent (NOI)**

City staff alert developers that they may be required to submit a Notice of Intent for to apply coverage under the NPDES Construction Stormwater General Permit and/or the NPDES General Industrial Stormwater Permit. This step typically occurs through the pre-application process. Submittal of the Notice of Intent and Discharge Management Reports are now completed online through Ecology's Secure Access Washington (SAW) website.

#### **S5.C.6.e Staff Training**

Follow-up training is provided as needed to address changes in standards, procedures, techniques, and staffing. As relevant stormwater training becomes available, city staff receive additional training to sharpen their skills. Staff who are not able to attend are briefed on new information by those who were able to attend the training. All construction inspection staff are Certified Erosion and Sediment Control Leads (CESCLs). The city documents training records, usually in the form of saved presentations and dated sign-in sheets.

## Section 5.C.7 – Pollution Prevention and Operations and Maintenance for Municipal Operations

The goal of this work is to prevent or reduce pollutant runoff by regularly maintaining the municipal stormwater system and requiring maintenance for private stormwater facilities. The city of Mountlake Terrace emphasizes that any operation and maintenance activities must be performed in a manner that reduces potential impacts to stormwater runoff and receiving waters.

### **5.C.7.a Maintenance Standards**

[MTMC Section 16.21.100](#) requires minimum maintenance standards for stormwater infrastructure, regular inspection, and requires that maintenance is completed within a specific timeframe as described in the city's approved Stormwater Manual.

### **5.C.7.b Maintenance of Facilities Regulated by the City**

Privately-owned flow control and treatment systems approved by the city after August 2010 are inspected on an annual basis. New private stormwater treatment and flow control facilities are added to the inspection list following construction completion and one year warranty fulfillment. If inspection indicates that maintenance standards as per the city's adopted Stormwater Manual are not being met, property owners are required to maintain or repair facilities within a reasonable amount of time. Records are kept on inspection dates, outcomes, and follow-up.

### **5.C.7.c Maintenance of Facilities Owned or Operated by the City**

*Stormwater treatment and flow control BMPs/facilities.* City staff annually inspect and maintain municipal flow control and water quality treatment facilities to meet maintenance standards. Inspections of detention pipes and vaults and associated flow control structures are carried out by the Public Works field crews; inspections of the Public Works yard, water quality filtration systems, swirl separators, ponds, detention vaults, biofiltration swales, and infiltration facilities are carried out by the stormwater program manager. Spreadsheets are used to track date of inspection, whether or not maintenance was required, and all follow-up. Maintenance and/or repair occurs within the time limits required by the NPDES permit. New stormwater water quality treatment and flow control facilities are added to the inspection list once the contractor warranty period is completed. The city has selected an asset management system (Activov), and implementation of the asset management system began in 2022.

*Major Storm Event Inspections.* The process for major storm event inspections has been documented in a May 6<sup>th</sup> 2020 memo to the Public Works Director. Critical spots in the municipal stormwater system are inspected before, during, and after storm events that are less than the 10-year, 24-hour storm by trained O&M crews. Maintenance and repair is performed as needed. For rainfall events that meet or exceed the threshold for a 10-year, 24-hour storm (in Mountlake Terrace, 3 inches within 24 hours), spot checks of potentially damaged stormwater infrastructure are completed and documented by O&M crews and the stormwater program manager within 3 days. O&M crews collect basic information on the status of the drainage structures checked: initials of the inspector; date of inspection; status of the stormwater BMP/facility; and any maintenance completed (in the comments column.) If the spot checks show widespread damage or maintenance needs, all city-owned stormwater BMPs/facilities will be inspected within 1 week. This more intensive inspection will be completed by O&M crews, the

stormwater PW supervisor, and/or the stormwater program manager. Records for major storm event inspections are managed by the stormwater program manager.

#### **S5.C.5.d Catch Basin Inspections**

The city has opted to inspect all municipally operated catch basins every two years. Maintenance and cleaning of catch basins (when needed) occurs within 6 months of inspection, as required by the permit.

#### **S5.C.7.d Practices, Policies, Procedures to Reduce Stormwater Impacts of Municipal Operations**

In 2020, the MLT Stormwater O&M Standard Operating Procedures Manual was developed as a training tool to illustrate proper municipal procedures to protect stormwater for: pipe cleaning; culvert cleaning; ditch maintenance; street cleaning; road repair and resurfacing, including pavement grinding; snow and ice control; utility installation; pavement striping maintenance; maintaining roadside areas, including vegetation management; dust control; application of fertilizers, pesticides, and herbicides; sediment and erosion control; landscape maintenance and vegetation disposal; trash and pet waste management. The SOPs are reviewed and updated regularly. A copy of the SOPs has been distributed to every field vehicle for easy reference, and new staff are trained on this SOP.

#### **S5.C.7.e O&M Employee Training**

Training for all operations and maintenance field staff on procedures necessary to protect receiving waters is delivered frequently in person at the Public Works facility, in the form of on-the-job training and also more formal training events. The training covers spill detection, investigation, and response; inspection protocols, procedures for regular municipal activities to protect water quality, and documentation.

#### **S5.C.7.f Stormwater Pollution Prevention Plan (SWPPP) for Mountlake Terrace’s Public Works Yard**

The SWPPP for the City’s Operations Center was originally developed in February 2010, and is updated every year (or more frequently as required.) The facility is inspected each year in the spring by the stormwater program manager, and a “punch list” of any areas or procedures requiring improvement is developed. Records of these annual inspections remain with the stormwater manager’s copy of the SWPPP and are available for review upon request. In 2023, the Operations Center’s parking lot will be resurfaced, to reduce pavement fragmentation.

#### **S5.C.7.g Record Maintenance**

The city maintains records of inspection, maintenance, and repair to city operated stormwater facilities as detailed in this plan. These records include public and private stormwater facility inspection records, major storm check documentation, sign-in sheets and presentations used for training, and standard operating procedures.

### **Section 5.C.8 – Source Control Program for Existing Development**

The goal of this requirement is to reduce pollutants in stormwater runoff for existing land uses and activities by requiring operational and/or structural BMPs to protect stormwater from contamination.

**S5.C.8.b.i Ordinance Requiring the Application of Source Control BMPs**

In November 2021, staff proposed and City Council unanimously passed an ordinance requiring operational and structural BMPs for businesses to protect water quality. The operational and structural BMPs for businesses code update became effective May 30, 2022. The additional time between code adoption and code implementation is necessary to complete business outreach, staff training, and fully develop other aspects of the new source control inspection program.

**S5.C.8.b.ii Inventory Development**

A preliminary inventory of approximately 120 Mountlake Terrace businesses with potential outdoor pollutant-generating sources or activities has been developed, using the categories defined in Ecology’s NPDES permit Appendix 8. The source of the list was the business license database maintained by the State of Washington. In 2022, the list was renewed (to capture any new businesses which have started to operate since the list was initially generated in 2021.) Business inspection priority is determined through analysis of NAICS codes and visual evidence the degree of hazard as determined by windshield surveys. The sites to be inspected will be the sites largest amount of potentially harmful outdoor storage and/or activities (such as vehicle washing) located in the highest priority drainage basin (Hall Creek basin.)

**S5.C.8.b.iii Program Implementation**

Trained city staff are ready to start source control inspections as of January 1, 2023. Checklists, forms, resources, and public outreach materials have been produced, and a draft list of businesses to be inspected in 2023 has been created. The program implementation follows the guidelines for the *2022 Source Control Inspection Program Guidance Manual for Western Washington*.

**S5.C.8.b.iv Progressive Enforcement Policy**

This code will be enforced under the city’s existing progressive enforcement code for water quality violations ([MTMC 16.21.110](#).) The existing enforcement code includes voluntary correction agreements, notice of civil violation, and penalties.

**S5.C.8.b.v Inspector Training**

Training and new business inspection protocols are required for successful implementation of a source control inspection program. In 2021, city staff shadowed the work of source control inspectors from other cities to learn how other cities have implemented their programs. This inspection training allowed staff to identify important program components, and to ask follow-up questions based on specific inspection situations. In 2023, inspection staff will follow the guidelines for conducting business/site inspections, recordkeeping, and education and outreach materials in the 2022 Source Control Inspection Program Guidance Manual for Western Washington. The 2019 Stormwater Manual BMPs for specific activities will also be used as a resource



## Section 7 – Compliance with Total Maximum Daily Load Requirements (TMDL)

The city has a TMDL requirement to reduce inputs of fecal coliform in Scriber Creek (tributary to Swamp Creek.) Mountlake Terrace, along with Brier, Snohomish County and other associated cities in the Swamp Creek watershed. This portion of the Permit requires specific actions from these communities, including business inspections, public education and outreach, operations and maintenance, IDDE investigations, targeted source identification and elimination, and surface water monitoring.

*Business inspections.* There is only one business, a veterinary clinic, which qualifies as a potential fecal coliform source in the Scriber Creek Basin (as defined by Appendix 2 of the current NPDES permit.) The veterinary clinic is frequently inspected by city staff. The last inspection was in 2020, and all past inspections of the clinic have indicated that all applicable source control BMPs for bacteria were in place and being followed. The clinic will be re-inspected in 2023.

### *Public education and outreach*

Signs on the proper disposal of pet waste have been posted in likely areas where people typically walk dogs. In 2021, city staff placed door hangers in multi-family housing areas within the basin to promote the city's Adopt-A-Drain program. Drain markers have been installed in 60% of the watershed area within city limits. In 2022, staff completed a windshield survey of apartment complexes in this part of the city to determine where additional pet waste bag stations may be needed. As part of ongoing efforts to reach pet waste owners, the city will conduct additional social media outreach on proper pet waste disposal in 2023.

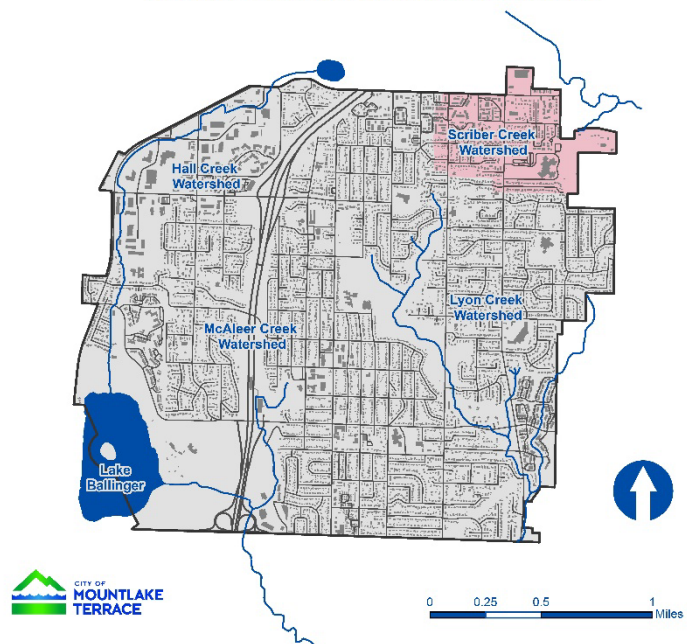
### *Operations & maintenance*

There are no public parks in the TMDL-affected area of Mountlake Terrace. A sign encouraging pet waste disposal has been posted at the only municipally-owned property in the basin (a wastewater lift station.)

### *IDDE*

All city outfalls to the Scriber Creek system are screened for fecal coliform during the summer dry season. In 2021, most outfalls had low fecal coliform. One outfall sampled in summer 2021 had a high fecal coliform result (5,700 CFU/100 ml.); the rest of the outfalls had low fecal coliform numbers. Subsequent follow-up investigation of the high fecal coliform outfall using CCTV and dye testing proved that that there was no sewer cross-connection. Follow-up testing for fecal coliform in this location showed no repeat of the higher fecal coliform numbers seen initially. Dry and wet weather testing for fecal coliform was repeated for all storm connections to Scriber Creek in 2022. The city will continue wet

Scriber Creek in Mountlake Terrace





and dry weather sampling for fecal coliform in stormwater conveyance pipes which drain to Scriber Creek in 2023.

*Targeted Source Identification & Elimination*

Since the area of Scriber Creek basin within city boundaries is relatively small (194 acres), Ecology has accepted the entire sub-basin area within the city limits as the high priority area. Future source control and elimination efforts will include business inspections and more fecal coliform sampling, including sampling during storms, to source trace the fecal coliform.

*Surface water monitoring*

The City of Brier conducts monthly sampling for fecal coliform in Scriber Creek, and shares that data with the City of Mountlake Terrace. In turn, Mountlake Terrace staff compile the data and provide charts for inclusion in the annual report to Ecology. Inconsistent fecal coliform numbers from the monthly surface water sampling work by City of Brier staff (low in the winter, occasionally high in the summer) seem to indicate that there may be an illegal dumping rather than a cross-connection problem in the basin. In 2023, high fecal coliform sample results will continue to trigger source investigations in the Mountlake Terrace.

## Section 8 - Monitoring and Assessment

The goals of monitoring and assessment under the Permit are to: 1) study recommended BMPs to determine their effectiveness after implementation and through time; 2) monitor freshwaters to determine whether the region is achieving its goal of clean water; and 3) track and record efforts in stopping pollution sources.

### **S8.A Status and Trends Monitoring and S8.B Effectiveness and Source Identification Studies**

Contributing to regional monitoring programs is by far the most cost-effective option for the city to meet monitoring and assessment goals; Mountlake Terrace will continue to contribute funding to both the Puget Sound Status and Trends Monitoring and Stormwater Management Program Effectiveness and Source Identification Studies programs in 2023.