

# PRIVATE STORMWATER INSPECTION

## Program Document

### Abstract

This program document has been assembled in response to Section S5.C.7(b) of the Department of Ecology Phase 2 Municipal Stormwater Permit.



City of Puyallup  
January 5, 2023

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## Introduction

The City of Puyallup is required to implement an inspection program to meet the requirements of the National Pollutant Discharge and Elimination System (NPDES) Phase II Municipal Stormwater General Permit (MSWGP) to discharge to waters of the state while within the general conditions of the Permit. The NPDES Phase II Municipal Permit will be referred to as “the Permit” for the remainder of the document.

The City’s inspection program for privately owned and maintained stormwater facilities is referred to as the Private Stormwater Inspection (PSI) Program.

This plan outlines how the City’s PSI Program is meeting the requirements of the Permit, what the requirements are and how the program was created, implemented and the daily operations of the program.

## Permit Requirements and City Municipal Code

The following section provides an overview of the Permit requirements related to the Private Stormwater Inspection Program, along with the City of Puyallup Municipal Code (PMC). The section and page of the Permit or the section of the municipal code is listed below.

### C5.C.7 Operations and Maintenance

Each Permittee shall implement and document a program to regulate maintenance activities and to conduct maintenance activities by the Permittee to prevent or reduce stormwater impacts.

#### **The minimum performance measures are:**

- a. Each Permittee shall implement maintenance standards that are as protective, or more protective, of facility function than those specified in the *Stormwater Management Manual for Western Washington* or a Phase I program approved by Ecology. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard. No later than June 30, 2022, Permittees shall update their maintenance standards as necessary to meet the requirements of this Section.
  - i. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility’s required condition at all times between inspections. Exceeding the maintenance standard between inspections and/or maintenance is not a permit violation.
  - ii. Unless there are circumstances beyond the Permittee’s control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:
    - Within 1 year for typical maintenance of facilities, except catch basins.
    - Within 6 months for catch basins.
    - Within 2 years for maintenance that requires capital construction of less than \$25,000.Circumstances beyond the Permittee’s control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.
- b. Maintenance of stormwater facilities regulated by the Permittee
  - i. The program shall include provisions to verify adequate long-term O&M of stormwater treatment and flow control BMPs/facilities that are permitted and constructed pursuant to S.5.C.6.c and shall be maintained in accordance with S5.C.7.a.  
The provisions shall include:

- (a) Implementation of an ordinance or other enforceable mechanism that:

- Clearly identifies the party responsible for maintenance in accordance with maintenance standards established under S5.C.7.a.
  - Requires inspection of facilities in accordance with the requirements in (b), below.
  - Establishes enforcement procedures.
- (b) Annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the MS4 and were permitted by the Permittee according to S5.C.6.c, including those permitted in accordance with requirements adopted pursuant to the 2007-2019 Ecology municipal stormwater permits, unless there are maintenance records to justify a different frequency.
- Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 – *Certification and Signature*.
- ii. Compliance with the inspection requirements in (b), above, shall be determined by the presence and records of an established inspection program designed to inspect all facilities, and achieving at least 80% of required inspections.
  - iii. The program shall include a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained.

### PMC 21.10.230 Inspections and Notice

(1) Developers that apply for any land-disturbing permit, street excavation permit, clearing, filling and grading permit, building permit, or other approval or permit that triggers application of this chapter, or developers that engage in development, redevelopment and construction projects, implicitly consent that the city has authority to enter the project site at any reasonable time and inspect the site to verify compliance with the approved stormwater site plan and any applicable law or regulations, including those outlined in the latest Stormwater Management Manual approved for City use.

(2) The city shall have authority to enter and inspect all development, redevelopment and construction project sites to verify compliance with the approved stormwater site plan and any applicable law or regulation, and verify proper installation and maintenance of required erosion and sediment controls. An authorized representative of the city may enter private property at all reasonable times to conduct inspections, tests or to carry out other duties imposed by the code.

(3) For inspection programs authorized by PMC 21 .10 Article VI-I, when not directly related to an open permit, the city may provide advance mailings of its intent to inspect properties consistent with such inspection programs; provided the city receives no objection from the property owner, the city may inspect private facilities consistent with the terms provided in the advance mailings. An authorized representative of the city may enter private property at all reasonable times to conduct inspections, tests or to carry out other duties imposed by the code, provided the utility shall first notify the proper owner or person responsible for the premises. If entry is refused, the public works director or designee shall have recourse to every remedy provided by law to secure entry.

(4) If the city observes any violation of the approved stormwater site plan, the city shall implement the enforcement noticing and correction procedures identified in PMC Title I.

## PMC 21.10.260 Inspection for Preventative Maintenance

(1) Preventive maintenance for publicly owned permanent storm water treatment, flow control and LID facilities shall be ensured through inspections by the city.

(2) Preventative maintenance for privately owned permanent storm water treatment, flow control and LID facilities shall be ensured through inspection by the designated responsible party as identified in the maintenance and operations plan. Original inspection records will be maintained at the location designated in the maintenance and operations plan. A copy of all inspection reports for the calendar year will be submitted to the public works department no later than January 30th of the following year.

(3) Inspection reports shall be maintained by the city on all publicly and privately owned retention, detention and LID facilities and shall include, for example, when applicable, but shall not be limited to, the following:

- (a) The date of inspection;
- (b) Name of inspector;
- (c) The condition of:
  - (i) Vegetation;
  - (ii) Fences;
  - (iii) Spillways;
  - (iv) Embankments;
  - (v) Reservoir area;
  - (vi) Outlet channels;
  - (vii) Underground drainage;
  - (viii) Sediment load;
  - (ix) Dispersion devices;
  - (x) Permeable pavement;
  - (xi) Green roof;
  - (xii) Drainage structures; or
  - (xiii) Any other item that could affect the proper function of storm water facilities;
- (d) Description of needed maintenance.

(4) If, after an inspection by the city, the condition of an element of the privately owned storm water drainage system presents an imminent and material risk of danger to the public health, safety or welfare, the city may take such action as may be necessary to protect the public and make the facility safe. The city may assess any cost incurred by the city against the entity that is responsible for, or benefits from, the operation and maintenance of the privately owned storm water drainage system. (Ord. 3130 § I (Exh. A), 2016; Ord. 2951 § I (Exh. A), 2010).

### **PMC 21.10.270 Maintenance Agreement**

(1) Prior to the issuance of any land disturbing permit, street excavation permit, clearing, filling and grading permit, building permit, or other approval or permit that triggers application of this chapter, the city shall require the developer to execute an inspection and maintenance agreement that is binding on all subsequent owners of land served by the private stormwater facility. Such agreement shall provide for access to the system at reasonable times for regular inspection by the city and for regular or special assessments of property owners to ensure that the facility is maintained in proper working condition to meet design standards and any provisions established.

(2) The agreement shall be recorded by the developer and/or owner in the land records of Pierce County.

(3) The agreement shall also provide that, if after notice by the city to correct a violation requiring maintenance work and satisfactory corrections are not made by the responsible entities within a reasonable period of time as determined by the city, the city may perform all necessary work to place the facility in proper working condition. The city may assess the cost of the work and any penalties against the entity that is responsible for, or benefits from, the operation and maintenance of the facility, and there shall be a lien on the property, which may be placed on the tax bill and collected as ordinary taxes by the city. (Ord. 2951 § 1 (Exh. A), 2010).

### **PMC 21.10.280 Maintenance Responsibility**

(1) The owner of the property on which work has been done pursuant to this chapter for private storm water drainage systems, or any other person, home owners or condominium association or agent in control of such property, shall maintain in good condition and promptly repair and restore all storm water facilities, including but not limited to elements such as grade surfaces, walls, drains, dams and structures, LID features, infiltration capacity, vegetation, erosion and sediment control measures, and other protective devices. Such repairs or restorations and maintenance shall be in accordance with the approved storm water site plan.

(2) Pursuant to the Stormwater Manual, especially Chapter 2.5.9 of Volume I, the developer shall provide to the city an operations and maintenance manual that is consistent with the provisions in Chapter 4.6 of Volume V of the Stormwater Manual for all proposed storm water facilities and BMPs, and the party (or parties) responsible for maintenance and operation shall be identified. At private facilities, a copy of the manual shall be retained on site or within reasonable access to the site, and shall be transferred with the property to the new owner. For public facilities, a copy of the manual shall be retained in the appropriate department in public works. A log of maintenance activity that indicates what actions were taken shall be kept and be available for inspection by the city.

(3) The maintenance and operation of a private storm water drainage system shall be the responsibility of the property owner(s). Furthermore, the property owner(s) shall, in accordance with the operation and maintenance schedule, record and log maintenance performed and date. Operation and maintenance records shall be retained by the property owner for a minimum of three years and shall be filed with the city public works department annually no later than January 30th for the preceding year's report and be available to the city for inspection at all reasonable times.

(4) Revisions to maintenance and operations plans for privately owned storm water facilities must have prior approval of the public works director or his/her designee.

(5) The city shall be responsible for the maintenance and operation of all public storm water drainage facilities located within public easements and rights-of-way following the completion of the successful maintenance period and the acceptance of such facilities by the city. (Ord. 3130 § 1 (Exh. A), 2016; Ord. 2951 § 1 (Exh. A), 2010).

### PMC 21.10.290 Violation – Penalty

(1) Any person convicted of violating the provisions of this chapter is guilty of a gross misdemeanor and upon conviction thereof shall be subject to a fine of not more than \$5,000 or imprisonment not exceeding one year or both for each and every violation with costs imposed at the discretion of the court. Each day that the violation continues shall be a separate offense. In addition, the city may institute injunctive, mandamus or other appropriate action or proceedings at law or equity for the enforcement of this chapter or to correct violations of this chapter, and any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent, injunctions or mandamus or other appropriate forms of remedy or relief.

(2) In addition to, or in lieu of the provisions of subsection (1) of this section, the city shall reserve the right to recover all reasonable costs incurred abating, cleaning, replacing or repairing adverse impacts to the stormwater system, appurtenances, surface waters, aquifers, wetlands or watercourses resulting from a deleterious discharge from a determinable source or sources. Failure to pay appropriate charges or delinquencies in payment shall result in a property lien. (Ord. 2951 § 1 (Exh. A), 2010).

## Program Overview

The purpose of the City of Puyallup's PSI Program is to ensure stormwater facilities, that are privately owned and maintained, are maintained, and continue to function properly. The program is intended to identify deficiencies of private stormwater systems that need maintenance, or worst-case scenario, at risk of failure. The program is intended to be preventative by conducting inspections and identifying facilities overdue on maintenance. When regular maintenance intervals are not followed, the contaminants generated, due to lack of maintenance, have a potential to reach the Municipal Separate Storm Sewer System (MS4) or waters of the state. If stormwater systems are not maintained properly, they can introduce localized flooding, increase pollutant loads, cause underground infrastructure to fail, result in failure of above ground infrastructure, and can create poor aesthetics for above ground facilities.

The City of Puyallup also has an Illicit Discharge Detection and Elimination (IDDE) Program, this program is more reactive by identifying illegal connections, discharges, or spills that have already occurred or entered the MS4 and eliminating them. The City also has a Business Source Control (BSC) Program. The BSC Program is different than both the IDDE Program and PSI Program. The BSC Program focuses more on individual businesses, education of pollutants, pollutant generators and how to contain and store materials properly.

The PSI Program has been designed to provide annual inspections to private property owners with stormwater facilities within the City of Puyallup. Inspectors provide property owners or property managers with information on how to properly maintain and implement BMP's to protect stormwater quality. An inspection report for all facilities located onsite is provided to the property owner or property manager and includes any corrections that need to be made.

## Inventory Development

The initial PSI inventory was developed by looking at permitted developments and specifically which developments were permitted under the 2005 Stormwater Management Manual for Western Washington (SWMMWW) or a later edition of the manual. Development projects constructed on or after February 16, 2010, with privately maintained stormwater treatment or flow control BMPs were added to the inventory list. The initial inventory consisted of approximately 40 sites.

The PSI Program has grown over the past 12 years with the total number of sites increasing to 81.

## Inventory Adjustments and Updates

To keep the inventory up to date for the PSI Program, Development and Permitting Services will notify the inspector of any new development projects that have been finalized and no longer have a stormwater financial guarantee in place. This process will only happen for projects where stormwater facilities will be privately maintained, which is primarily commercial, short plats and multifamily development. At this time, the inspector will add the facility to the list of sites to be inspected every year.

Coordination will also occur with the Stormwater Collections Division to map the facility in GIS so it can be input into NPDESPro for inspection. The NPDESPro Site ID (PSI-XXXXXX) will also be assigned to any stormwater assets related to the inspection at this time.

In addition to the update process described previously, as inspections are conducted, inspector(s) will update contact information and site information throughout the inspection process, as needed. Any complaints received will also be investigated, and if the site is not already on the inventory list, it will be added at the time of the inspection.

## Inventory Prioritization and Ranking

Puyallup's PSI Program does not have a detailed ranking system in place. The priority for most sites is treated equal, though sites with Operations and Maintenance Manuals and Stormwater Maintenance Agreements are the highest priority to ensure the requirements of the NPDES Permit are met. Sites with valid complaints are also inspected and are of second priority. Other sites, as staff time allows are of the lowest priority. These sites go above and beyond NPDES Permit requirements.

## Equipment and Materials

The equipment needed for inspection will vary depending on the site, type of stormwater facilities being inspected and inspector preference. In general, the inspector should be prepared with appropriate documents, field equipment and Personal Protective Equipment (PPE). The following table lists the equipment required for a successful PSI inspection.

Inspection Equipment and Materials		
Documents	Equipment	Safety Equipment
<ul style="list-style-type: none"><li>• Business Cards</li><li>• Field Tablet or Laptop for recordkeeping</li><li>• NPDESPro Access and Login</li><li>• Private Stormwater Inspection Site ID and Site File in NPDESPro</li></ul>	<ul style="list-style-type: none"><li>• Camera, phone or device for taking pictures with time and date stamp and location tag</li><li>• Spotlight, flashlight or equivalent</li><li>• Sediment probe</li><li>• Pole mirror</li></ul>	<ul style="list-style-type: none"><li>• Hard hat (optional depending on business and site activities)</li><li>• Steel-toed boots</li><li>• ANSI 107-1099 safety vest</li><li>• Safety glasses (optional depending on business and site activities)</li></ul>



<ul style="list-style-type: none"> <li>• Traffic Control Plan (TCP) (if traffic needs to be impacted in the ROW)</li> </ul>	<ul style="list-style-type: none"> <li>• Catch basin hook</li> <li>• Impact Drill with ½” allen impact socket</li> <li>• Various wrenches, pick tools and hammers</li> <li>• Shovel, rake, or pitchfork</li> <li>• Traffic cones, advanced warning signs and flagging paddles (spotter/flagger in safety equipment)</li> </ul>	<ul style="list-style-type: none"> <li>• Gloves</li> <li>• Hearing protection (optional depending on site business and site activities)</li> <li>• Spotter and/or Flaggers (only needed in high traffic areas or where a partial lane must be taken to perform the inspection safely)</li> </ul>
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Most inspections can be conducted with one inspector, if an additional inspector or staff member is needed, the inspector needs to schedule with appropriate staff before the inspection date. In the event additional staff is not available, the inspector should note on the report the reason for the structure, pond, swale, etc. not being inspected. Inspectors should always ensure their safety while performing inspections.

## Inspections Process

### Pre-Inspection and Investigation

Inspections are conducted once a year for most facilities to meet the requirements of the Permit. Before onsite inspections occur, the inspector completes a pre-inspection. During the pre-inspection the inspector reviews overall facility compliance and maintenance history. The pre-inspection may include reviewing any documents, previous inspection reports, photos, invoices/receipts provided by the property owner and if any specific coordination needs to occur prior to arriving onsite. The inspector will also evaluate what tools and materials are needed to successfully complete the inspection prior to arriving onsite.

### Onsite-Inspection and Documentation

During the onsite inspection, every facility is inspected and photographed to ensure it meets the maintenance standards in the *City of Puyallup Site Management Plan*. If any maintenance standard is determined to be insufficient, as deemed by the inspector, it is documented in the inspection report. Every maintenance standard for all stormwater infrastructure and each onsite facility is reviewed and documented in the inspection report. Access covers and catch basin lids are removed to thoroughly inspect the facilities and determine compliance. The only exception is if removing or inspecting a portion of a facility is deemed hazardous to the public or the inspector. This is determined at the discretion of the inspector. Some facilities may require an additional staff member to perform the inspection safely. This may include having a spotter or a traffic control crew to conduct the inspection.

### Post-Inspection and Follow-up Activities

After the inspection is completed, the inspection report is sent to the property owner or property manager to review and make any necessary corrections. All documentation of maintenance activity needs to be submitted, by the property owner, to the City for recording and Permit compliance. Any property that has an outstanding maintenance history, may be subject to enforcement action. Please see the following section on enforcement for details.

## Enforcement

If compliance cannot be achieved, the inspector should follow the following enforcement steps:

1. Technical Assistance and Inspections
2. Corrective Action and Corrective Letters
3. Notice of Violation (NOV) and Coordination with Code Compliance Division

The inspector should try all means necessary prior to coordinating with the Code Compliance Division and issuing a NOV. If progress is made on a Corrective Action Letter, by the date specified, but not all items have been addressed, the inspector should reissue the Corrective Action Letter and re-inspect. If no progress is made on a Corrective Action Letter, by the date specified, the inspector should move to a formal NOV and coordinate with the Code Compliance Division. If there are extenuating circumstances, the inspector will work with the property owner to work towards compliance.

### Staff Training

Inspector(s) undergo on the job training and are required to take the *City of Puyallup Stormwater 101 Training Course* within one (1) month of being hired. For more information on training, please see the *City of Puyallup Stormwater Training Plan*.

### References

The following references were used as resources to compile the *City of Puyallup Private Stormwater Inspection Program Document*.

State of Washington Department of Ecology. (2019, July). *Western Washington Phase II Municipal Permit*.

Herrera. (2021, December). *SOURCE CONTROL INSPECTION PROGRAM GUIDANCE MANUAL* (Washington Stormwater Center & Stormwater Action Monitoring, Eds.). Herrera Environmental Consultants, Inc. <https://www.wastormwatercenter.org/permit-assistance/municipal/source-control-inspection-program-guidance-manual/>

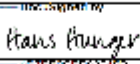
Washington Stormwater Center & City of Olympia. (2020, January). *Business Inspection Program Report*. Business Inspection Group. <https://www.wastormwatercenter.org/wp-content/uploads/FINAL-Business-Inspection-Report-2-16-1.pdf>

# Appendix A – Private Stormwater Inspection Enforcement Policy

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## PUBLIC WORKS Policy & Procedure

Subject:	Private Stormwater Inspection Enforcement Policy		
Index:	ENGINEERING	Page 1 of 3 pages	Number: ENG 22-06
Approved by:	 HANS HUNGER, PE CITY ENGINEER		Supersedes: N/A
			Effective Date: 12/31/2022

### 1.0 **PURPOSE:**

The purpose of this policy is to document private stormwater drainage system inspection procedures required pursuant to PMC 21.10.230, PMC 21.10.260, PMC 21.10.270 and the National Pollutant Discharge and Elimination System (NPDES) Phase II Municipal Stormwater General Permit (MSWGP). To provide consistent guidance to City staff conducting storm drainage system inspection and notification processes. To also clarify procedures for entering private property when conducting these inspections as allowed pursuant to PMC 21.10.270 and PMC 21.10.230.

### 2.0 **POLICY:**

Engineering staff shall conduct annual inspections of all private stormwater drainage systems approved on or after February 16, 2010, under the Department of Ecology's 2005 Stormwater Management Manual of Western Washington (SWMMWW) or subsequent stormwater manuals to ensure the proper maintenance and function of these systems. Private drainage systems approved under prior surface water design manuals may be inspected semi-regularly to ensure their maintenance and function. It is essential to ensure the maintenance and function of private stormwater systems to minimize impacts to the city owned and operated stormwater system and natural waterways.

### 3.0 **PROCEDURES:**

#### Background

Beginning in 2010, pursuant to Section S5.C4.c.iii of the Western Washington Phase II Municipal Stormwater Permit (NPDES Permit) issued in 2007, the City began conducting annual inspections of private stormwater facilities approved under the 2005 SWMMWW.

#### Entry onto Private Property

No notification is required prior to entering private property to conduct stormwater system inspection pursuant to PMC 21.20.270. However, the City should make reasonable effort to notify property owners or their agent when possible. Notification is required prior to entering a

property, pursuant to PMC 21.10.230(3), to conduct a stormwater system inspection on private property without a recorded maintenance agreement.

#### Denial of Access

If access to the private drainage system is denied by physical or other means, the property owner shall be notified that maintenance of the stormwater system is mandated under PMC 21.20.270. Further, the property owner has the option for the inspection of their storm system.

1. Provide/allow access by City staff to conduct the inspection, which is a service provided by the Surface Water Utility.
2. Pay for a qualified third party to conduct an inspection of the system consistent with current SWMMWW and City of Puyallup maintenance standards and provide a copy of the detailed inspection report to identified City staff within 30 days of this notification.
  - a. If maintenance/repair is required, they must provide documentation verifying that said maintenance/repair has been conducted within that same 30 day time period or allow city staff to re-inspect.

#### Timing of Inspections

Inspections shall be conducted at reasonable times, during normal business hours (Monday through Friday between 8 AM and 5 PM).

#### Maintenance or Repair Requirements

If inspections reveal that maintenance or repair is required to ensure the facility is functioning properly, the property owner and/or their agent shall be notified in writing that they have 30 days to conduct the maintenance or repair work and provide documentation verifying that said maintenance/repair has been conducted. Said notification shall also Identify Specific Repair and Maintenance Items (if applicable).

#### Extension of Maintenance or Repair Period

If the property owner can provide sufficient justification; and delay of repair/maintenance of the private stormwater facilities will not result in adverse impacts to the public storm system or natural waterways, the City Engineer or designee may grant an extension of the 30 day maintenance/repair window. Said extension shall be granted in writing and shall not exceed the timelines for maintenance and repair identified in the NPDES Permit.

#### Re-Inspection

Upon the expiration of the 30 day maintenance/repair period identified in the property owner notification letter, City staff shall conduct a follow up inspection of the private stormwater system to ensure identified maintenance and repair items have been addressed.

#### Enforcement

If maintenance and/or repair items have not been addressed within the timeline required, or if the property owner has denied staff access and has failed to provide sufficient documentation verifying the drainage facilities have been inspected and maintained/repared within 30 days, the case may proceed to enforcement action for resolution pursuant to PMC 21.10.290 or PMC 21.11.070.

**4.0 ORGANIZATIONS AFFECTED:**

Public Works Engineering  
Development and Permitting Services