

# City of Newcastle

## NPDES PHASE II

### Stormwater Management Program Plan



City of Newcastle

Stormwater Management Program

March 2016

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# 1. INTRODUCTION

This report represents the stormwater management program (SWMP) document prepared by the City of Newcastle (City) in accordance with the National Pollutant Discharge Elimination System (NPDES) Phase II Western Washington Municipal Stormwater Permit (Phase II permit).



The Phase II permit is a requirement of the Federal Clean Water Act (CWA), which requires the City to develop a stormwater management program that includes numerous actions and activities with the overall goal of reducing the discharge of pollutants from its storm sewer system, to the maximum extent practicable, and of protecting the water quality. The actions and activities are described in a number of program components under Section S5 of the Phase II permit. The Phase II permit directs the City to prepare a SWMP document that includes a description for each of the program components.

This section provides background information on the Phase II permit followed by a mission statement from the City regarding its stormwater management activities. Finally, this section outlines the structure for the remainder of the SWMP report.

## 1.1 BACKGROUND AND OVERVIEW

The following provides a brief background to, and overview of, the Phase II permit processes that have occurred to date:

- The federal Clean Water Act (CWA) was modified in 1987 to include stormwater in the NPDES permit program. That is, a municipality such as the City, will need an NPDES permit to discharge stormwater from its municipal storm sewer system, or MS4, to waters of the state.
- In the state of Washington, the United States Environmental Protection Agency (EPA) has given the Washington State Department of Ecology (Ecology) the authority to issue such permits.
- In 1999, EPA issued final Phase II rules to include all municipalities in census-defined urban areas with the current population greater than 1,000.
- The City is determined to be an operator of a regulated small MS4, in an Ecology-designated urbanized area, and is therefore required to submit for approval and receive coverage under an Ecology Phase II permit.

Ecology developed the Phase II permit, which allows the City of Newcastle to discharge stormwater from its MS4 into surface waters of Washington State, provided the City implements a stormwater management program to:

- Reduce the discharge of pollutants from its MS4 to the maximum extent practicable (MEP)
- Meet state AKART (All Known, Available, and Reasonable Technologies) standards
- Protect water quality

This Phase II permit authorizes discharges of non-stormwater flows to surface waters and to groundwaters of the state from the City's MS4 only under the following conditions:

- The discharge is authorized by a separate NPDES or State Waste Discharge permit.
- The discharge is from emergency fire-fighting activities.
- The discharge is from another illicit or non-stormwater discharge that is managed by the City as provided in Special Condition Sections S5.C.3.b and S6.C.3.b of the permit.

The Phase II permit requires the City to develop a stormwater management program that includes the following components from Section S5.C of the permit:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from New Development, Redevelopment, and Construction Sites
- Pollution Prevention and Operation and Maintenance for Municipal Operations
- Monitoring

The SWMP document is to also include any additional information on meeting applicable Total Maximum Discharge Limits, or TMDLs, pursuant to Section S7 of the permit. Since no TMDLs apply to the City's receiving waters at this time, this report does not address TMDL issues.

The City is required to report annually on progress in permit implementation for the prior year, and submit a Stormwater Management Plant (SWMP) report that describes the program activities for the coming year. The implementation of various Permit conditions is phased throughout the five-year Permit term, August 1, 2013 through July 31, 2018.

### **City of Newcastle Mission Statement**

The City is dedicated to developing a stormwater management program that contributes to protecting the environment. This includes coordinating with others towards this common goal, continuing with the successful programs the City currently has in place, and providing opportunities for input from the citizens of Newcastle.

Because this document is to be updated annually, it is considered a working document that will be modified as necessary to reflect adaptations the City needs to make as the stormwater management program is developed. The City will make every effort to be transparent with such

modifications through is Public Education and Involvement programs as well as through the annual SWMP submittal process.

Furthermore, it is recognized that the City will need to evaluate the resources necessary to develop and sustain a successful SWMP. To that end, the City is committed to working with City staff to support implementation of the stormwater management program, and conduct a funding analysis to determine what funding is required to sustain the City's SWMP.

## 1.2 DOCUMENT ORGANIZATION

This document is organized by Program component according to the following sections:

<b>Section 1</b>	Program Introduction
<b>Section 2</b>	Oversight and Administration (S5.A, S5.B & S9)
<b>Section 3</b>	Public Education and Outreach (S5.C.1)
<b>Section 4</b>	Public Involvement and Participation (S5.C.2)
<b>Section 5</b>	Illicit Discharge Detection and Elimination - Overall Goals (S5.C.3)
<b>Section 6</b>	Controlling Runoff from New Development, Redevelopment, and Construction Sites (S5.C.4)
<b>Section 7</b>	Pollution Prevention and Operation and Maintenance (S5.C.5)
<b>Section 8</b>	Monitoring Activities

## 2. PROGRAM MANAGEMENT AND ADMINISTRATION

This section outlines the oversight and administrative activities necessary to support the development and implementation of the City's SWMP.



### Coordination

The City currently coordinates with King County and other Phase I and II jurisdictions on issues related to maintenance, development, transportation, and drainage as needed. The City participates in the following coordination opportunities: Regional Operations and Maintenance Program (ROAD MAP), Phase II Permit Coordinators Forum, Stormwater Outreach for Regional Municipalities (STORM), WRIA 8 Salmon Recovery Council, SWG (Stormwater Monitoring Group) and Stormwater Outreach Group- King County (SOG).

### Tracking Program

The City currently uses a Request for Action (RFA) Form and/or Public Works Maintenance Work Order (WO) Form when responding to drainage complaints or illicit discharges received by telephone calls, email, or in person at City Hall. This data will be migrated into the City's new

asset management database in April. This upgrade will include the addition of a phone app for easier resident reporting. Incoming requests from the public will link directly to the asset and work management program.

All public and private stormwater facilities and drainage infrastructure attributes are mapped in ArcGIS and tracked in a geodatabase to ensure adequate and timely inspection, maintenance and repair. This data can be viewed at <http://arcg.is/1WoBOmp>.

### Training Program

The City is committed to participate in the Regional Road Maintenance Endangered Species Act (ESA) Training Program and the Certified Erosion and Sediment Control Lead Training Program (CESCL).

The City currently provides additional trainings annually and on an as-needed basis on topics like IDDE, permitting, plan review, operation and maintenance, and inspections.

## 3. PUBLIC EDUCATION AND OUTREACH

This section summarizes the Phase II permit requirements for the public education and outreach, describes current activities the City has underway for public education and outreach.

The Permit (Section S5.C.1) requires the City to:

i. To build general awareness, Permittees shall select from the following target audiences and subject areas:

(a) General public (including school age children), and businesses (including home-based and mobile businesses)

- General impacts of stormwater on surface waters.
- Impacts from impervious surfaces.
- Impacts of illicit discharges and how to report them.
- Low impact development (LID) principles and LID BMPs.
- Opportunities to become involved in stewardship activities.

(b) Engineers, contractors, developers and land use planners

- Technical standards for stormwater site and erosion control plans.
- LID principles and LID BMPs.
- Stormwater treatment and flow control BMPs/facilities.



ii. To effect behavior change, Permittees shall select from the following target audiences and BMPs:

- (a) General public (which may include school age children), businesses (including home-based and mobile businesses)
  - Use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
  - Equipment maintenance.
  - Prevention of illicit discharges.
- (b) Residents, landscapers and property managers/owners
  - Yard care techniques protective of water quality.
  - Use and storage of pesticides and fertilizers and other household chemicals.
  - Carpet cleaning and auto repair and maintenance.
  - Vehicle, equipment and home/building maintenance.
  - Pet waste management and disposal.
  - LID principles and LID BMPs.
  - Stormwater facility maintenance.
  - Dumpster and trash compactor maintenance.

b. Each Permittee shall create stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities such as stream teams, storm drain marking, volunteer monitoring, riparian plantings and education activities.

c. Each Permittee shall measure the understanding and adoption of the targeted behaviors for at least one target audience in at least one subject area. No later than February 2, 2016, Permittees shall use the resulting measurements to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors. Permittees may meet this requirement individually or as a member of a regional group.

## ACTIVITIES

The City currently has an active public education and outreach program that uses a variety of approaches to inform the community about stormwater-related pollution prevention activities.

The City, in conjunction with King Conservation District, is starting a new hands-on learning program to educate school aged children in Newcastle. This year we'll be in classrooms at Hazelwood elementary. The learning objectives include the importance of clean water, water pollution and where it comes from, and methods of reducing pollution from human activities. Participants in the program will sign a pledge stating how they're going to prevent water pollution in their daily lives.



The City is contracting with ECOSS to increase awareness and understanding of stormwater management among business owners, managers and employees and encourage businesses to practice pollution prevention and best management practices.

As part of the LID code integration process, the City will create new outreach materials for developers, contractors and property owners. These materials will explain LID principles and BMPs.

In 2016, Newcastle is stepping up efforts on proper pet waste management. The City, in partnership with Regional Animal Services of King County (RASKC), is providing additional outreach materials, including pet waste bags to each dog owner who pledges to pick up pet waste. This outreach will be done when pets are registered within the City and encourages behavior change when walking their dogs in areas that don't have stationary pet waste dispensers.

#### Additional Education and Outreach Activities:

- Wetland restoration event on Earth Day.
- Tree planning and maintenance workshop. Free tree to participants to increase Newcastle's tree canopy.
- Partnerships with organizations including Coal Creek Utility District, WSU Master Gardeners, and Newcastle Weed Warriors.
- Newcastle Spills Hotline for after-hours, non-emergency, reporting by citizens of spills, other illicit discharges, and polluters;
- Storm drain markers containing the words "*Puget Sound Starts Here: This Drains to a Creek and then to Puget Sound*"
- Outdoor doggie bag dispensers to provide a degradable alternative to plastic bags for pet owners; and
- Private stormwater facility outreach to change the way private facility owners maintain stormwater systems. This will include a maintenance manual with guidelines for property owners.

The City participates in the Stormwater Outreach for Regional Municipalities (STORM) forum and the King County Stormwater Outreach Group (SOGgies) for regional public education and outreach efforts. The City will be addressing noxious weeds in riparian corridors and developing partnerships with groups such as King Conservation District and Newcastle Weed Warriors.

## 4. PUBLIC INVOLVEMENT AND PARTICIPATION

This section summarizes the Phase II permit requirements for public involvement and participation, describes current activities the City has underway for public involvement and participation.

Section S5.C.2 of the Phase II permit requires the City to include ongoing opportunities for public involvement through advisory councils, watershed committees, participation in developing rate structures, stewardship programs, environmental activities, or other similar activities.

The City is also required to make its SWMP document, annual report, and all other submittals required under the Phase II permit available to the public.

### ACTIVITIES

- *Community feedback* —The City encourages public comment in the development and implementation of the City's SWMP. The process to obtain feedback continues at public meetings concerning NPDES Phase II requirements and through email, in writing, or by phone as indicated by the participation memo. The latest program document and annual report are posted on the City's website.
- *LID Code Integration Process* – The City is developing a web page to share information and receive feedback on this process. A survey will be created to get feedback from interested parties. The public can also give input at Planning Commission meetings when information is presented.
- *City of Newcastle City Clerk's Office, Newsletter, and Website* —The City uses the City Clerk's office for public notification of public meetings pertaining to Phase II requirements involving further development of the City's SWMP. The City uses the newsletter and website for notification of local stewardship and environmental activities/events/programs.
- *Stewardship* – The City plans to continue the storm drain marker program and has ongoing opportunities to volunteer in wetland and riparian restoration activities.

### **Continue Ongoing Public Involvement/Participation Strategies**

#### **Create opportunities for public involvement/community feedback**

The City encourages public comment in the development and implementation of the City's SWMP. The process to obtain feedback continues at public meetings concerning Phase II requirements and through email, in writing, or by phone as indicated on the website and on the participation memo.

Opportunities for local community feedback were provided at up to four City Council meetings and at a public open houses.

### **Retain venues for public notification**

The City has retained the following venues in an effort to keep its residents informed on development and implementation of the City's stormwater management program:

1. Stormwater Management Program webpage on the City's website. The City's new, user friendly website will be up this summer allowing us to post videos and other media to increase awareness.
2. Newcastle Newsletter: included in citizen waste management bill mailings.
3. Public meetings for public input: City Council meetings and public open houses
4. Newcastle Community Events: Newcastle Days and Music in the Park

### **Address any public comments to the SWMP development**

The City addresses comments with regard to SWMP development. However, no public comments were received during the reporting period specifically regarding SWMP development.

### **Post the SWMP document on the City's website along with contact information for comments**

The latest SWMP document and annual report are posted on the City's website. The City encourages public comment in the development and implementation of the City's SWMP. Comments can be addressed to:

Angela Gallardo, Surface Water Program Manager  
12835 Newcastle Way, Suite 200  
Newcastle, WA 98056-1316  
425.649.4143 Ext. 111  
[angelag@ci.newcastle.wa.us](mailto:angelag@ci.newcastle.wa.us)

## 5. ILLICIT DISCHARGE DETECTION AND ELIMINATION

This section summarizes the Phase II permit requirements for illicit discharge detection and elimination (IDDE), describes current activities the City has underway.



### PERMIT REQUIREMENTS

The City is required by Section S5.C.3 of the permit to implement an ongoing program to detect and remove illicit connections, discharges, and improper disposal, including any spills not under the purview of another responding authority, into the MS4 owned or operated by the City. The goals and requirements of the City's IDDE program are as follows:

#### Maintain Existing Programs

The City will maintain ongoing IDDE programs and update municipal stormwater system mapping, as well as investigate and remove illicit discharges and connections to the City storm system. These programs include:

1. Maintenance of the 24 hour Spills Hotline.
2. Staff training on the identification and reporting of illicit connections and discharges.
3. Newcastle Municipal Code 13.05.025 lists prohibited discharges and gives the City the ability to enforce water quality violations.
4. The City's storm sewer system, wetlands, and receiving waters are in a GIS database. The City's Public Works Department frequently revises the GIS database to include new facilities or update existing data. This data can be viewed at <http://arcg.is/1WoBOmp>.
5. The City has education and outreach outlets available to them that have been previously mentioned and that can complement activities required for an IDDE program. The City has previously used brochures, fact sheets, and applicable operational BMPs such as storm drain markers and warning signs (BMP 2-41). The City will coordinate these activities in its IDDE program.
6. The City has the capability through their Maintenance Department IDDE internal protocols to address any illicit discharges that the City is found responsible for. These protocols include, when appropriate, notification, identification, investigation, cleanup and reporting.
7. The City currently requires staff in the City's Public Works Department to participate in the Regional Road Maintenance Endangered Species Act Training (ESA Track 3) Program and

the Certified Erosion and Sediment Control Lead (CESCL) Training Program. Other training are identified and provided on an as-needed basis for illicit discharges and illicit connections.

8. Utilizing Ecology's 2013 Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual (IDDE Manual) as a procedural guide, the City has begun to implement a combination of Catch Basin/Manhole and Outfall inspections as the IDDE Field Screening Methodology. A partnership with Coal Creek Utility District (CCUD) will continue to ensure there are no illicit connections to the City's MS4.

## **6. CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES**

This section summarizes the Phase II permit requirements for runoff from new development, redevelopment, and construction sites; describes current activities the City has underway; planned activities needed within the permit cycle; and presents activities the City plans to undertake to bring its current program in compliance with the Phase II permit requirements and scheduled efforts through the end of the permit cycle.



The minimum performance measures are:

- a. Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects.
- b. The program shall include a permitting process with site plan review, inspection and enforcement capability to meet the standards listed in (i) through (iv) below, for both private and public projects, using qualified personnel (as defined in Definitions and Acronyms).
  - i. Review of all stormwater site plans for proposed development activities.
  - ii. Inspect, prior to clearing and construction, all permitted development sites that have a high potential for sediment transport as determined through plan review.
  - iii. Inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.
  - iv. Inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. Verify that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater treatment and flow control BMPs/facilities. Enforce as necessary based on the inspection.
  - v. Compliance with the inspection requirements in (ii), (iii) and (iv) above, shall be determined by the presence and records of an established inspection program designed to inspect all sites. Compliance during this permit term shall be determined by achieving at least 80% of scheduled inspections.
  - vi. An enforcement strategy shall be implemented to respond to issues of non-compliance.

- c. The program shall include provisions to verify adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities that are permitted and constructed.
- d. The program shall make available as applicable copies of the "Notice of Intent for Construction Activity" and copies of the "Notice of Intent for Industrial Activity" to representatives of proposed new development and redevelopment. Permittees shall continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.
- e. Each Permittee shall ensure that all staff whose primary job duties are implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.
- f. Low impact development code-related requirements.
- g. Watershed-scale stormwater planning.

#### **Maintain Existing Programs (S5.C.4)**

The City will continue to maintain existing development review and inspection programs as well as stormwater standards for controlling runoff from new development, redevelopment, and other construction sites in 2016.

#### **Low Impact Development (LID) Integration (S5.C.4.f)**

In addition to maintaining existing programs, the City is updating City codes, standards, policies and plans necessary to ensure LID techniques won't be limited by current policies. This work will be completed December 2016.

### **ACTIVITIES**

The City of Newcastle currently has an active program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction site activities. The existing program currently applies to both public and private projects, including roads. The current compliance activities associated with the above permit requirements include:

- The current program has existing municipal codes and engineering design standards that are enforced through the current permit, plan review, and inspection processes to reduce pollutants from stormwater runoff.
- The City has adopted the 2009 KCSWDM that gained equivalency from Ecology. The 2016 KCSWDM will be adopted this year.
- The City records and maintains inspections and enforcement actions by staff.
- There is a system of escalating enforcement procedures necessary to sustain the existing codes and standards throughout the construction/development process in Chapters 13.10 and 4.05 of the municipal code.
- All sites are inspected by the City prior to the start of construction, during construction, and post construction.

## 7. POLLUTION PREVENTION AND OPERATION AND MAINTENANCE

This section summarizes the Phase II permit requirements for pollution prevention and operation and maintenance, describes current activities the City has implemented to meet the Phase II requirements, and identifies activities that the City plans to undertake to bring its current program in compliance with the Phase II permit requirements and scheduled efforts through the end of the permit cycle.



1. The City conducts annual inspection of all municipally owned or operated permanent stormwater treatment and flow control facilities. If necessary, inspections are followed by maintenance to ensure continued functionality. The maintenance schedule is:
  - Within 1 year for typical facility maintenance, except catch basins
  - Within 6 months for catch basins
  - Within 2 years for maintenance that requires capital construction of less than \$25,000.
2. The City conducts spot checks of potentially damaged permanent treatment and flow control facilities, after major (greater than 24-hour-10-year recurrence interval rainfall) storm events. If spot checks reveal widespread damage/maintenance needs, inspect all stormwater treatment and flow control facilities that may be affected.
3. Catch basins are inspected and maintained, if necessary, once every two years. Inspection of all catch basins will be completed by August 1<sup>st</sup>, 2017.
4. At least 95 percent of all sites where inspection is required, either cyclically or storm-event related, are inspected.
5. The City is continuing practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads, or highways owned or maintained by the City and road maintenance activities conducted by the City. The following activities shall be addressed:
  - Pipe cleaning
  - Cleaning of culverts that convey stormwater in ditch systems
  - 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 fertilizer, pesticides, and herbicides, as well as the development of nutrient management and integrated pest management plans
  - Sediment and erosion control
  - Landscape maintenance and vegetation disposal
  - Trash management
  - Building exterior cleaning and maintenance.
6. The City provides ongoing training for employees of the City whose construction, operation or maintenance job functions may affect stormwater quality.
- Records of inspections and maintenance or repair activities conducted by the City are documented and a summary of actions taken are included in the operation and maintenance section of the annual report.
  - City maintenance crews are responsible for spills response. Although City crews are primarily responsible for spills within the right-of-way, they are often the first group to respond to spills reporting regardless of where they are located. Spill kits are provided in city maintenance vehicles to address minor spills. Assistance would be sought out in the event that spill kits could not contain quantities that exceed its capacity.
  - The City provides training for staff on operation and maintenance activities such as ESA Track 3 (Regional Road Maintenance ESA training), and Municipal Stormwater Pollution Prevention.

## **8. MONITORING AND ASSESSMENT**

This section summarizes the Phase II permit requirements for monitoring and assessment, describes current activities the City has implemented to meet the Phase II requirements, and identifies activities that the City plans to undertake to bring its current program in compliance with the Phase II permit requirements.

Section S8 requires the City to:

- Notify DOE of its choice to independently conduct Status and Trends Monitoring and Effectiveness Studies, or participate by paying annually into the Regional Stormwater Monitoring Program (RSMP) that will be conducted by DOE.
- Pay into the RSMP to implement the Source Identification Information Repository (SIDR) element of the RSMP.

### **Current Activities**

The City of Newcastle has chosen to pay into the RSMP and have DOE conduct the Status and Trends Monitoring and Effectiveness Studies.

### **Planned Activities**

The City of Newcastle will continue to meet its annual payment obligation.

## DEFINITIONS AND ACRONYMS

**AKART** means all known, available, and reasonable methods of prevention, control and treatment. See also State Water Pollution Control Act, chapter 90.48.010 RCW and chapter 90.48.520 RCW.

**All known, available and reasonable methods of prevention, control and treatment** refers to the State Water Pollution Control Act, chapter 90.48.010 RCW and chapter 90.48.520 RCW.

**Applicable TMDL** means a TMDL which has been approved by EPA on or before the issuance date of this Permit, or prior to the date that Ecology issues coverage under this Permit, whichever is later.

**Beneficial Uses** means uses of waters of the state, which include but are not limited to use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

**Best Management Practices** are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by Ecology that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

**BMP** means Best Management Practice.

**Bypass** means the diversion of stormwater from any portion of a stormwater treatment facility.

**Census defined urban area** means Urbanized Area.

**Circuit** means a portion of a MS4 discharging to a single point or serving a discrete area determined by traffic volumes, land use, topography or the configuration of the MS4.

**City** refers to the City of Newcastle.

**Component or Program Component** means an element of the Stormwater Management Program listed in S5 Stormwater Management Program for Cities, Towns, and Counties or S6 Stormwater Management Program for Secondary Permittees, S7 Compliance with Total Maximum Daily Load Requirements, or S8 Monitoring of this permit.

**Conveyance system** means that portion of the municipal separate storm sewer system designed or used for conveying stormwater.

**CWA** means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L.(6-483 and Pub. L. 97-117, 33 U.S.C. 1251 *et seq.*).

**Discharge Point** means the location where a discharge leaves the Permittee's MS4 through the Permittee's MS4 facilities/BMPs designed to infiltrate.

**Entity** means a governmental body, or a public or private organization.

**EPA** means the U.S. Environmental Protection Agency.

**General Permit** means a permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

**Groundwater** means water in a saturated zone or stratum beneath the surface of the land or below a surface water body. Refer to chapter 173-200 WAC.

**Hazardous substance** means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090 or WAC 173-303-100.

**Heavy equipment maintenance or storage yard** means an area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers and other heavy equipment are washed, maintained, or stored.

**Hydraulically near** means runoff from the site discharges to the sensitive feature without significant natural attenuation of flows that allows for suspended solids removal. See Appendix 7 Determining Construction Site Sediment Damage Potential for a more detailed definition.

**Hyperchlorinated** means water that contains more than 10 mg/Liter chlorine.

**Illicit connection** means any infrastructure connection to the MS4 that is not intended, permitted or used for collecting and conveying stormwater or non-stormwater discharges allowed as specified in this permit (S5.C.3 and S6.D.3). Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the MS4.

**Illicit discharge** means any discharge to a MS4 that is not composed entirely of stormwater or of non-stormwater discharges allowed as specified in this permit (S5.C.3 and S6.D.3).

**Impervious surface** means a non-vegetated surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or stormwater areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.

**Land disturbing activity** means any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to clearing, grading, filling and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered land disturbing activity. Vegetation maintenance practices, including landscape maintenance and gardening, are not considered land disturbing activity. Stormwater facility maintenance is not considered land disturbing activity if conducted according to established standards and procedures.

**LID** means Low Impact Development.

**LID BMP** means low impact development best management practices.

**LID Principles** means land use management strategies that emphasize conservation, use of onsite natural features, and site planning to minimize impervious surfaces, native vegetation loss, and stormwater runoff.

**Low Impact Development** means a stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

**Low impact development best management practices** means distributed stormwater management practices, integrated into a project design, that emphasize pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration. LID BMPs include, but are not limited to, bioretention, rain gardens, permeable pavements, roof downspout controls, dispersion, soil quality and depth, vegetated roofs, minimum excavation foundations, and water re-use.

**Material Storage Facilities** means an area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.

**Maximum Extent Practicable** refers to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

**MEP** means Maximum Extent Practicable.

**MS4** means municipal separate storm sewer system.

**Municipal Separate Storm Sewer System** means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains): (i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of Washington State. (ii) Designed or used for collecting or conveying stormwater. (iii) Which is not a combined sewer; (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.; and (v) Which is defined as “large” or “medium” or “small” or otherwise designated by Ecology pursuant to 40 CFR 122.26.

**National Pollutant Discharge Elimination System** means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington State Department of Ecology.

**Native vegetation** means vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest and which reasonably could have been expected to naturally occur on the site. Examples include trees such as Douglas Fir, western hemlock, western red cedar, alder, big-leaf maple; shrubs such as willow, elderberry, salmonberry, and salal; and herbaceous plants such as sword fern, foam flower, and fireweed.

**New development** means land disturbing activities, including Class IV General Forest

Practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of hard surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development. Refer to Appendix 1 for a definition of hard surfaces.

**NOI** means Notice of Intent.

**Notice of Intent** means the application for, or a request for coverage under a General Permit pursuant to WAC 173-226-200.

**Notice of Intent for Construction Activity** means the application form for coverage under the *Construction Stormwater General Permit*.

**Notice of Intent for Industrial Activity** means the application form for coverage under the *General Permit for Stormwater Discharges Associated with Industrial Activities*.

**NPDES** means National Pollutant Discharge Elimination System.

**Outfall** means a point source as defined by 40 CFR 122.2 at the point where a discharge leaves the Permittee's MS4 and enters a surface receiving waterbody or surface receiving waters. Outfall does not include pipes, tunnels, or other conveyances which connect segments of the same stream or other surface waters and are used to convey primarily surface waters (i.e., culverts).

**Permittee** unless otherwise noted, the term "Permittee" includes city, town, or county Permittee, Co-Permittee, New Permittee, Secondary Permittee, and New Secondary Permittee.

**Physically Interconnected** means that one MS4 is connected to another storm sewer system in such a way that it allows for direct discharges to the second system. For example, the roads with drainage systems and municipal streets of one entity are physically connected directly to a storm sewer system belonging to another entity.

**Project site** means that portion of a property, properties, or right-of-ways subject to land disturbing activities, new hard surfaces, or replaced hard surfaces. Refer to Appendix 1 for a definition of hard surfaces.

**QAPP** means Quality Assurance Project Plan.

**Qualified Personnel** means someone who has had professional training in the aspects of stormwater management for which they are responsible and are under the functional control of the Permittee. Qualified Personnel may be staff members, contractors, or

volunteers.

**Quality Assurance Project Plan** means a document that describes the objectives of an environmental study and the procedures to be followed to achieve those objectives.

**RCW** means the Revised Code of Washington State.

**Receiving waterbody or receiving waters** means naturally and/or reconstructed naturally occurring surface water bodies, such as creeks, streams, rivers, lakes, wetlands, estuaries, and marine waters, or ground water, to which a MS4 discharges.

**Redevelopment** means, on a site that is already substantially developed (i.e., has 35% or more of existing hard surface coverage), the creation or addition of hard surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of hard surface that is not part of a routine maintenance activity; and land disturbing activities. Refer to Appendix 1 for a definition of hard surfaces.

**Regional Stormwater Monitoring Program** means, for all of western Washington, a stormwater-focused monitoring and assessment program consisting of these components: status and trends monitoring in small streams and marine nearshore areas, stormwater management program effectiveness studies, and a source identification information repository (SIDIR). The priorities and scope for the RSMP are set by a formal stakeholder group. For this permit term, RSMP status and trends monitoring will be conducted in the Puget Sound basin only.

**RSMP** means Regional Stormwater Monitoring Program.

**Runoff** is water that travels across the land surface and discharges to water bodies either directly or through a collection and conveyance system. See also "Stormwater."

**Sediment/Erosion-Sensitive Feature** means an area subject to significant degradation due to the effect of construction runoff, or areas requiring special protection to prevent erosion. See Appendix 7 Determining Construction Site Sediment Transport Potential for a more detailed definition.

**Shared water bodies** means water bodies, including downstream segments, lakes and estuaries that receive discharges from more than one Permittee.

**SIDIR** means Source Identification Information Repository.

**Significant contributor** means a discharge that contributes a loading of pollutants considered

to be sufficient to cause or exacerbate the deterioration of receiving water quality or instream habitat conditions.

**Source control BMP** means a structure or operation that is intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful management of activities that are sources of pollutants. Structural Source Control BMPs are physical, structural, or mechanical devices, or facilities that are intended to prevent pollutants from entering stormwater. Operational BMPs are non-structural practices that prevent or reduce pollutants from entering stormwater.

**Stormwater** means runoff during and following precipitation and snowmelt events, including surface runoff, drainage or interflow.

**Stormwater Associated with Industrial and Construction Activity** means the discharge from any conveyance which is used for collecting and conveying stormwater, which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant, or associated with clearing, grading and/or excavation, and is required to have an NPDES permit in accordance with 40 CFR 122.26.

**Stormwater Management Program** means a set of actions and activities designed to reduce the discharge of pollutants from the MS4 to the MEP and to protect water quality, and comprising the components listed in S5 (for cities, towns, and counties) or S6 (for Secondary Permittees) of this Permit and any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7 *Compliance with TMDL Requirements*, and S8 *Monitoring and Assessment*.

**Stormwater Treatment and Flow Control BMPs/Facilities** means detention facilities, treatment BMPs/facilities, bioretention, vegetated roofs, and permeable pavements that help meet Appendix 1 Minimum Requirements #6 (treatment), #7 (flow control), or both.

**SWMP** means Stormwater Management Program.

**TMDL** means Total Maximum Daily Load.

**Total Maximum Daily Load** means a water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation must also account for seasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The Clean Water Act, section 303, establishes the water quality standards and TMDL

programs.

**Tributary conveyance** means pipes, ditches, catch basins, and inlets owned or operated by the Permittee and designed or used for collecting and conveying stormwater.

**UGA** means Urban Growth Area.

**Urban Growth Area** means those areas designated by a county pursuant to RCW 36.70A.110.

**Urbanized Area** is a federally-designated land area comprising one or more places and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile. Urbanized Areas are designated by the U.S. Census Bureau based on the most recent decennial census.

**Vehicle Maintenance or Storage Facility** means an area where any vehicles are regularly washed or maintained, or stored.

**Water Quality Standards** means Surface Water Quality Standards, chapter 173-201A WAC, Ground Water Quality Standards, chapter 173-200 WAC, and Sediment Management Standards, chapter 173-204 WAC.

**Waters of the State** includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the state" as defined in chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and water courses within the jurisdiction of the State of Washington.

**Waters of the United States** refers to the definition in 40 CFR 122.2.