



City of Newcastle

NPDES Phase II

Stormwater Management Program Plan



2019

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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.	18
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.	18
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.	18
Discharge Point means the location where a discharge leaves the Permittee’s MS4 through the Permittee’s MS4 facilities/BMPs designed to infiltrate.	19
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.	19
NPDES means National Pollutant Discharge Elimination System.	22
SWMP means Stormwater Management Program.	24
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.....	25
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.....	25

1. INTRODUCTION

This report represents the Stormwater Management Program (SWMP) Plan 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), and in some states, the federal Environmental Protection Agency (EPA) delegates permit authority to state environmental agencies. In Washington, the NPDES permit authority is the Washington State Department of Ecology (Ecology).



The 2013-2018 (extended to 2019) Phase II permit requires the City to develop a SWMP Plan that includes numerous actions and activities with the overall goals of protecting water quality and of reducing the discharge of pollutants from its municipal separate storm sewer system (MS4), to the maximum extent practicable (MEP). 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; a mission statement from the City regarding its stormwater management activities; and finally, this section outlines the structure for the remainder of the SWMP Plan.

1.1 NPDES Phase II Permit Background

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 EPA has given 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 a Phase II permit.

Ecology developed the Phase II permit, which allows the City to discharge stormwater from its MS4 into surface waters of Washington State, provided the City implements a SWMP 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 SWMP 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 and Assessment

The SWMP document is also intended to include any additional information on meeting applicable Total Maximum Discharge Limits (TMDLs) pursuant to Section S7 of the Phase II 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 SWMP Plan 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. The current permit was extended by one year.

1.2 City of Newcastle Mission Statement

The City is dedicated to developing, implementing, and enhancing an adaptive stormwater management program that is committed to protecting water quality and the environment, and reducing pollutants in our stormwater systems. The SWMP Plan provides an outline of actions and activities that the City utilizes to accomplish these goals. The City is committed to continuing to build successful stormwater programs, reviewing programs and making adaptations as necessary, and continuing to coordinate and collaborate with other jurisdictions, agencies, organizations, business and property owners, residents, and other stakeholders to achieve our goals of protecting water quality, the environment, and reducing pollutants.

The SWMP Plan is updated annually, and is considered a working document that will be modified as necessary to reflect adaptations that contribute to a successful program. The City will make every effort to be transparent with such modifications through its public education and involvement programs as well as through the annual SWMP Plan submittal process.

1.3 Document Organization

This document is organized by program components according to the following sections:

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

2.1 Coordination

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



2.2 Tracking Programs

2.2.1 Drainage Complaints, Concerns, and Inquiries

The City receives notifications for drainage, water quality, and flooding concerns via <https://yourgov.cartegraph.com/> which is part of the City's asset management system, Cartegraph. The City also accepts inquiries via email, phone calls, or in person. Drainage inquiries, concerns, and requests are tracked in Cartegraph. Each request is assigned a request number, and City staff try to initially respond to inquiries or concerns within one business day.

2.2.2 Illicit Discharge Reporting

The City has a Spill Reporting hotline, for both business hours as well as evenings and weekends. When an illicit discharge call is received, City staff respond immediately to contain and either initiate or enforce cleanup efforts. Illicit discharges are tracked in an IDDE spreadsheet that includes spill response, containment, and cleanup efforts deployed. If necessary, and depending on the location of the spill or illicit discharge, the spill or illicit discharge is added to Cartegraph (the City's asset management system), TRAKIT (the City's permitting dataset), NPDES Pro (the City's database for privately maintained stormwater systems). Water quality violations are issued through a Notice and Order, and are tracked in our accounting database.

2.2.3 O&M and Inspection Programs

Public and private stormwater facilities and drainage infrastructure, receiving waters, and wetlands are mapped in a GIS database.

Publicly maintained stormwater systems are inspected per NPDES requirements and inspections are tracked in Work Orders (with subsequent tasks) in Cartegraph.

Privately maintained systems are inspected, depending on Phase II permit requirements, either annually or every other year. Inspections, maintenance, correspondence, and enforcement actions are tracked in the cloud-based program, NPDES Pro.

Construction stormwater/TESC inspections tracked in TRAKIT, the City's permit management database. Stormwater assets are added to GIS when a project is built, and assets are either added to Cartegraph or NPDES Pro databases for inspections.

2.2.4 Education Outreach & Public Participation Programs

The City tracks its education and outreach programs, training, and participation opportunities in an excel spreadsheet. Partnering programs, such as King Conservation District (KCD), track their outreach and education efforts and provide the City with a report at the end of the year.

2.3 Training Programs

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 training annually and on an as-needed basis on topics like IDDE, SWPPP training, permitting, plan review, operation and maintenance, and inspections. The City tracks its training programs and updates in spreadsheets.

3. PUBLIC EDUCATION AND OUTREACH

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

Section S5.C.1 of the Phase II permit requires the City to:

- i. To build awareness, Permittees shall select from the following target audiences and subject areas:
 - (a) General public (including school-aged 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 treatments and flow control BMPs/facilities.
- ii. To effect behavior change, Permittees shall select from the following target audiences and BMPs:
- (a) General public (including school-aged children), and 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.

As per the Phase II permit, “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,” (Ecology, 2012).

“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,” (Ecology, 2012).

3.1 Education & Outreach Activities

The City currently has an active public Education and Outreach (E&O) Program that uses a variety of approaches to inform the community about stormwater-related pollution prevention activities.

3.1.1 Watershed Education in Our Schools

2016-2018, the City partnered with King Conservation District (KCD) to provide a hands-on learning program to educate school-aged children in Newcastle. The learning objectives included the importance of clean water, water pollution and where it comes from, and methods of reducing pollution from human activities. Participants in the program signed a pledge stating how they're going to prevent water pollution in their daily lives. In 2019, staff will re-evaluate watershed education in area schools with the goal of providing education programs which meet the requirements of the re-issued Western Washington Phase II Municipal Stormwater Permit. Program development cannot begin until the permit is reissued on July 1st, 2019.

3.1.2 Pet Waste

The City, in partnership with Regional Animal Services of King County (RASKC), will continue to provide on-leash pet waste bag dispensers when dogs are registered at City Hall to encourage dog owners to always pick up poop when walking their dogs. The City will also continue to supply stationary pet waste bag dispensers in City Parks. In 2019, Newcastle will increase pet waste related outreach by writing a post on the Newcastle Knows Clean Water blog about pet waste.

3.1.2 LID Outreach

The City amended codes and adopted ordinances in December 2016 as part of the LID integration process. The City also adopted the 2016 King County Surface Water Design Manual (2016 KCSWDM) as part of the LID code integration process. In addition to adopting the 2016 KCSWDM, the City created a 2016 Addendum, which describes City-specific requirements. The City has added LID details to its Public Works Standards, and will be completing a comprehensive update for its Public Works Standards in 2019. The City will continue to develop new outreach materials for developers, contractors, and property owners. These materials will explain the importance and usage of LID principles and BMPs.

3.1.3 IDDE Outreach

2017-2018, the City contracted with ECOSS to increase awareness and understanding of stormwater management among business owners, managers, and employees. ECOSS encourages businesses to practice pollution prevention and best management practices. The City will also work with business and property owners/managers this year to provide outreach as part of the Privately Maintained Stormwater System Inspection Program. Educational efforts will include: overview of the stormwater system and its functioning, overview of potential pollutants, and site-specific BMPs. This year, the City will be updating its IDDE educational brochures.

3.1.4 Additional Education and Outreach Activities

- EcoFair, educational workshop events during Earth Week. Free tree voucher for residents that participate in the workshop to increase Newcastle's tree canopy.
- Restoration events or opportunities scheduled throughout the year.
- Shorelines/riparian area outreach, offered in conjunction with KCD.
- Partnerships with organizations including Coal Creek Utility District, King Conservation District, WSU Master Gardeners, and Weed Warriors Nature Stewards Program.
- 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*" and "Dump No Pollutants".
- Outdoor dog poop bag dispensers to encourage people to pick up after their dogs.

- Continuing to control and remove noxious weeds in riparian corridors, particularly Knotweed. The City utilized a grant in 2018 from King Conservation District for this work, and will continue efforts in 2019.
- City website and social media posts and updates about outreach activities and local resources, including, Puget Sounds Starts Here.

4. PUBLIC INVOLVEMENT AND PARTICIPATION

This section summarizes the Phase II permit requirements for public involvement and participation, and 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.

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 Plan. Comments can be addressed to:

SWM Division, Public Works Department
12835 Newcastle Way, Suite 200
Newcastle, WA 98056-1316
(425) 649-4444
SWM@newcastlewa.gov

4.1 Community Involvement

4.1.1 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 permit requirements and through email, in writing, or by phone. The latest program document and annual report are posted on the City's website.

4.1.2 Community Resources

The City uses the City Clerk's office for public notification of public meetings pertaining to Phase II permit requirements involving further development of the City's SWMP. The City uses the City website, calendar, social media, and occasionally flyers for notification of local stewardship and environmental activities/events/programs. The City re-designed its website in 2017, and the website is much more interactive. The webmaster adds posts and updates from the SWM Division that describe updates to current water quality monitoring, stormwater projects, and upcoming public participation opportunities.

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

- SWM Division webpage and Newcastle Knows Clean Water blog on the City's website. The City's new, user-friendly website and social media allows us to post videos and other media to increase awareness.
- Public meetings for public input: City Council meetings and public open houses
- Newcastle community events: Newcastle Days, Earth Week, Concerts in the Park

4.2 Community Stewardship Participation

The City is planning to provide a restoration project in 2019, as well as other outreach and participation opportunities. The City plans to continue the storm drain marker program.

5. ILLICIT DISCHARGE DETECTION AND ELIMINATION

This section summarizes the Phase II permit requirements for Illicit Discharge Detection and Elimination (IDDE), and describes current activities the City has underway. 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.



5.1 IDDE Program Activities

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 stormwater system. The goals and requirements of the City's IDDE program are as follows:

- Maintenance of the 24 hour Spills Hotline.
- Staff training on the identification and reporting of illicit connections and discharges.
- Newcastle Municipal Code 13.05.025 lists allowed and conditionally allowed discharges and gives the City the ability to enforce water quality violations that occur when non-stormwater or an illicit discharge enters the City's stormwater system.
- The City's MS4, 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.
- 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 uses brochures, fact sheets, and applicable operational BMPs such as storm drain markers. The City coordinates these activities in its IDDE program.
- The City tracks illicit discharges in spreadsheets, and either in Cartegraph, TRAKIT, or NPDES Pro. If an illicit discharge occurs, City staff provide education to the responsible party along with requiring containment and cleanup. Notice and Order of Water Quality Violations are assigned when applicable, and include recommendations to prevent future spills of illicit discharges.
- 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.
- 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). Other training opportunities are identified and provided on an as-needed basis for illicit discharges and illicit connections.

- 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 implemented and will continue to utilize a combination of Catch Basin/Manhole/Facility inspections 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; and planned activities.

6.1 Permit Requirements

The Phase II permit requires that the City:

- 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.

6.2 Existing Programs

As per Phase II permit Section 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 2019. The City 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 2016 KCSWDM that gained equivalency from Ecology, as well as the 2016 City Addendum for surface and stormwater design review for development and redevelopment projects.
- 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 NMC.
- All sites are inspected by the City prior to the start of construction, during construction, and post construction.

6.3 LID Integration

In addition to maintaining existing programs, the City updated City codes, standards, policies and plans necessary to ensure LID techniques won't be limited by current policies. This work was completed December 2016. The City is developing LID outreach materials for developers and contractors to utilize as a reference. The City developed LID details for its Public Works Standards, and is completing a comprehensive update for its Public Works Standards in 2018.

7. OPERATIONS & MAINTENANCE PROGRAM

This section summarizes the Phase II permit requirements for Operations & Maintenance (O&M) and pollution prevention, and describes current activities the City has implemented to meet the Phase II permit requirements.



7.1 Inspection Program

The City conducts annual inspections of all municipally owned or operated permanent stormwater treatment and flow control facilities. Catch basins are inspected and maintained, if necessary, once every two years. The City implemented its asset management system, Cartegraph, in 2016 and the City utilizes Cartegraph for inspections data, photos, and maintenance tasks.

7.2 Maintenance Program

If necessary, inspections are followed by maintenance to ensure continued functionality. The City Inspector assigns maintenance or repair tasks in Cartegraph immediately following an inspection. 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.



7.3 Post-storm Inspection Program

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.

At least 95 percent of all sites where inspection is required, either cyclically or storm-event related, are inspected.

7.4 Privately Maintained Stormwater System Inspection Program

In 2017, the City purchased a database to manage the Privately Maintained Stormwater Inspection Program. The City inspects privately maintained stormwater systems as part of Phase II permit requirements, as well as to reduce flooding, protect water quality, and to protect the City's MS4. Inspections are conducted either annually or every other year, depending on the Phase II permit requirements as they pertain to each privately maintained stormwater system. The City also provides education to property and/or business owners during the inspection process. The education includes: stormwater system knowledge, watershed knowledge, pollution prevention, and BMPs.

7.5 O&M Pollution Prevention

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 sweeping
- 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.

7.6 Training & Regional Coordination

The City provides ongoing training for employees of the City whose construction, operation or maintenance job functions may affect stormwater quality.

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 regardless of where they are located. Spill kits are provided in City maintenance vehicles to address minor spills. Assistance is sought out in the event that spill kits could not contain quantities that exceed its capacity.

The City also coordinates with neighboring jurisdictions that may involve surface water run-on or shared pipes for O&M timing and practices to enhance downstream water quality.

8. MONITORING AND ASSESSMENT

This section summarizes the Phase II permit requirements for monitoring and assessment, and describes current activities the City has implemented to meet the Phase II 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.

8.1 Current Activities

The City has chosen to pay into the RSMP (now SAM) and have Ecology conduct the Status and Trends Monitoring and Effectiveness Studies. The City will continue to meet its annual payment obligation. In addition, the City will continue to collaborate with the King County Lake Stewardship Monitoring Program to conduct water quality monitoring at Lake Boren, as well as coordinate with other agencies to participate in regional studies and monitoring.

9. LOOKING FORWARD

Washington State Department of Ecology intends to reissue the Western Washington Phase II Municipal Stormwater Permit on July 1, 2019. The reissued permit will go into effect on August 1st, 2019. Newcastle anticipates modifying existing programs and creating new programs to meet new permit requirements. This will impact our 2019 Stormwater Management Program Plan significantly. If you are interested in learning about changes to the 2019 Stormwater Management Program Plan resulting from the reissued permit, please contact:

Surface Water Management Division
12835 Newcastle Way, Suite 200
Newcastle, WA 98056-1316
425.649.4444
SWM@newcastlewa.gov

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.

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.

Ecology means the Washington State Department of Ecology.

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 (MS4) 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 (NPDES) 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 reasonable 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.