City of DuPont

Municipal Separate Storm Sewer System Stormwater Management Program

As required by the:
Western Washington Phase II Municipal Stormwater Permit

March 2020

ACRONYMS

AASF – Adopt-a-Stream Foundation
AGC – The Association of General Contractors
AKART – all known, available and reasonable methods of prevention, control, and treatment
BMPs – Best Management Practices
CESCL – Certified Erosion and Sediment Control Lead
the City – City of DuPont
DMC – DuPont Municipal Code
Ecology – Washington State Department of Ecology
EPA – US Environmental Protection Agency
LID – Low Impact Development
the Manual – Ecology's *2012 Stormwater Management Manual for Western Washington*
MS4 – Municipal Separate Storm Sewer System
NPDES – National Pollutant Discharge Elimination System
O&M – Operations and Maintenance
the Permit – *Western Washington Phase II Municipal Stormwater Permit*
PSA – Professional Service Agreement
PSAT – Puget Sound Action Team
PSP – Puget Sound Partnership
SWMP – Stormwater Management Program
SWPPP – Stormwater Pollution Prevention Plan
TESC – Temporary Erosion and Sediment Control
TMDL – Total Maximum Daily Load
WRIA – Water Resource Inventory Area

INTRODUCTION

This Stormwater Management Program (SWMP), required by Section S5.A.2 of the current National Pollutant Discharge Elimination System (NPDES) for *Western Washington Phase II Municipal Stormwater Permit* is organized according to the program components in Section S5.C. of the permit and will be reviewed and updated as applicable at least annually for submittal with the City of DuPont's annual reports to the Department of Ecology.

The current NPDES Phase II permit is on a five year term, effective August 1, 2019 through July 31, 2024. The Department of Ecology requires the City to report permit implementation progress annually for the prior year and submit a SWMP plan that describes the program activities required for the coming year. The implementation of the components and conditions of the permit are phased throughout the five-year permit term.

The SWMP document will consist of:

1. A description of each of the following components, which are outlined in Section S5.C. of the Permit:
    a. Stormwater Planning,
    b. Public Education and Outreach,
    c. Public Involvement and Participation,
    d. MS4 Mapping and Documentation
    e. Illicit Discharge Detection and Elimination,
    f. Controlling Runoff from New Development, Redevelopment, and Construction Sites,
    g. Municipal Operations and Maintenance,
    h. Source Control Program for Existing Development
2. Any additional actions implemented by the City pursuant to Section S5.C.
3. Any additional actions necessary to meet the requirements of applicable Total Maximum Daily Loads (TMDLs) pursuant to Section S7 of the Permit: *Compliance with Total Maximum Daily Load Requirements*.

The SWMP will be comprised of these components and designed to protect water quality by reducing the discharge of pollutants from the regulated small Municipal Separate Storm Sewer System (MS4) to the maximum extent practicable. These components have been selected by the City as reasonable methods to achieve the goals of the permit.

The SWMP is a planning and implementation document that can be used by the City to continue to meet permit requirements in the future. The program has three separate aims depending on the intended audience:

1. Ecology – Provide written documentation on how the City will meet permit requirements for the SWMP.
2. The public – Solicit input and build local support for the City's SWMP by posting it on the City website as described in the Public Involvement and Participation requirements.
3. City staff and officials – Build support and understanding for the SWMP.

The City is required to coordinate among departments by section S5. A.5.b. to eliminate barriers to permit compliance. The permit requirements are met through a range of City resources. Currently, the stormwater management program is primarily the responsibility of the Public Works Department. The Public Works Department provides mapping, maintenance, spill response, illicit discharge detection and elimination (IDDE), and capital projects administration. The Planning and Building Department conducts development review, and provides enforcement and planning services. Support on an as-needed basis is provided by the City Administrator, City Attorney, and the Finance Department.

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CHAPTER 1:
STORMWATER PLANNING

The Implementation of a stormwater planning program is required to inform and assist in the development of polices and strategies as water quality management tools to protect receiving waters. This is a new permit requirement introduced in the 2019-2024 NPDES Phase II permit. The minimum performance measures required are:

a. Convene an inter-disciplinary team
b. Coordination with long-range plan updates
c. Low impact development code requirements
d. Stormwater action management plan

Stormwater Planning Program

The City will implement these requirements as follows:

BMP 1(A): Convene an Inter-disciplinary Team

By August 1, 2020, the City will convene an inter-disciplinary team to inform and assist in the development, progress, and influence of this program and the activities under permit S5.C1.a.

BMP 1(B): Coordination with Long-Range Plan Updates

The inter-disciplinary team will assess and describe how stormwater management needs and protection/improvement of receiving water health have or have not informed the planning processes or influenced policies and implementation strategies. The report will describe the water quality and watershed protection policies, strategies, codes, and other measures intended to protect and improve local receiving water health. The report will be produced to answer the annual report questions due by March 31, 2021.

BMP 1(C): Low Impact Development Code-Related Requirements

The City will continue to implement the low impact development code related requirements. Annually the City will assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID Best Management Practices (BMPs).

BMP 1(D): Stormwater Management Action Plan (SMAP)

The City will began the SMAP to fulfill S5.C.1.d permit requirements. The permits requires a planning approach that emphasizes protection of designated uses and improvements to receiving water quality and habitat under both existing and anticipated future developed conditions. The SMAP will be focus on addressing impacts from the cumulative development in a watershed rather than on a single site or subdivision impacts. SMAP will help to answer the following questions:

- How can we most strategically address existing stormwater problems?
- How can we meet our future population and density targets while also protecting and improving conditions in receiving waters?

In order to complete the SMAP, The City will following these activities (Section S5.C.1.d.i-iii):

a. **Assess Receiving Water Bodies Conditions:** document and assess existing information related to the City receiving waters and contributing area conditions to identify which receiving waters are most likely to benefit from stormwater management planning.

   A watershed inventory that include a brief description of the relative conditions of the receiving waters and the contributing areas and a map of the delineated basins will be submitted by March 31, 2022.

b. **Receiving Water Prioritization:** Informed by the Assessment of Receiving Water Condition and other local and regional information, the City will develop and implement a prioritization method and process to determine which receiving waters will receive the most benefit from implementation of stormwater facility retrofits, tailored implementation of SWMP actions, and other land/development management actions (different than the existing new and redevelopment requirements).
   The retrofits and actions shall be designed to: 1) conserve, protect, or restore receiving waters through stormwater and land management strategies that act as water quality management tools, 2) reduce pollutant loading, and 3) address hydrologic impacts from existing development, as well as planned for expected future build out conditions.

   The City will document the prioritized and ranked list of receiving waters no later than June 30, 2022.

c. **Stormwater Management Action Plan:** No later than March 31, 2023, the City will develop a SMAP for at least one high priority catchment area from the receiving water prioritizing assessment. It will include:
   - A description of the stormwater facility retrofits needed for the area, including the BMP types and preferred locations.
   - Land management/development strategies identified for water quality management.
   - Targeted, enhanced, or customized implementation of stormwater management actions related to permit sections within S5 (IDDE field screening, Prioritization of Source Control inspections, O&M inspections or enhanced maintenance, or Public Education and Outreach behavior change programs).
   - Identification of needed changes to local long-range plans to address SMAP priorities, if applicable.
   - Implementation of schedule and budget for short-term actions (actions to be accomplished within 6 years) and long-term actions (actions to be accomplished within 7 to 20 years)

CHAPTER 2:
PUBLIC EDUCATION AND OUTREACH PROGRAM

Public involvement/participation activities can be effective tools used to gain much needed public support for regional water quality issues, stewardship and stormwater management programs. These activities will be aimed at residents, businesses, industries, elected officials, policy makers, planning staff and other employees of the City.

Public Education and Outreach Program

a. As part of the Permit requirements, each Permittee is to implement an education and outreach program for its stormwater service area. The program design shall be based on local water quality information and target audience characteristics to identify high priority target audiences, subject areas, and/or BMPs. Based on the target audience's demographic, the Permittee shall consider delivering its selected messages in language(s) other than English, as appropriate to the target audience. The City's public education and outreach program include the following areas:

   i. General Awareness: the City will review the current program and select annually, at a minimum, one target-audience and one subject area from either (a) or (b):

   (a) Target audiences: general public (including overburdened communities, or school age children) or businesses (including home-based, or mobile businesses). Subject areas:

   - General impacts of stormwater flows into surface waters.
   - Low impact development (LID) principles and LID BMPs.

   (b) Target audiences: engineers, contractors, developers, or 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. Behavior Change: the City will review current program and select, at a minimum, one-target audience and one BMP.

   (a) Target audiences: residents, landscapers, property managers/owners, developers, school age children, or businesses (including home-based or mobile businesses). The BMPs topics can be find in the permit section S5.C.2.a.ii.(a).

   The permit requires the City to develop a new behavior change campaign or conduct an evaluation of an existing behavior change campaign. If evaluation is selected, the City shall document lessons learned and recommendation, no later than July 1, 2020.

b. The City is partnering with Department of Ecology and other agencies across Western Washington through the Regional Stormwater Management Program (RSMP) and other regional efforts to better assess the understanding and adoption of the targeted behaviors among the various targeted audiences through various public education and outreach activities available both locally and regionally.

c. Stewardship opportunities: the City will continue providing multiple stewardship opportunities for residents every year. These opportunities are advertised on City's Facebook and website.

The City will continue our efforts to track and provide information regarding a variety of public education and outreach activities selected and made available.

The City is implementing the following BMPs as part of our public education and outreach activities to inform the general public on stormwater impacts:

- BMP 2(A): Stormwater Education Insert
- BMP 2(B): Stormwater Website
- BMP 2(C): Encourage Proper Disposal of Household Hazardous Waste
- BMP 2(D): Address Illegal Dumping and Littering
- BMP 2(E): Address Lawn and Garden Care Activities
- BMP 2(F): Education on Low Impact Development (LID)
- BMP 2(G): Stewardship Opportunities

Objective: Reduce pollutants from residential, commercial and industrial runoff through increased public awareness of the impacts of stormwater runoff.

BMP 2(A): Stormwater Education Insert

Measurable Goals

1. Provide informational content for stormwater subjects addressing items such as:
    - Citizen reporting under the illicit discharge and construction programs
    - Water quality impacts of stormwater runoff and impervious surfaces to the stormwater system and local water bodies
    - Children's education measures
    - Steps the public can take to reduce stormwater pollution including source control BMPs
    - Public involvement programs
    - Environmentally friendly landscaping and pest management techniques
2. Design inserts for bi-monthly utility bill addressing selected topics
3. Track the number of materials created and distributed

Description

The inserts are made available to all residents of the City and information will be appropriate for the public. The inserts will be included with both paper and electronic bills. The inserts can be effective by being engaging and concise, and may contain brief, important messages, provide overview of problems and solutions, or implore simple actions.

The City will also continue to align with the many regional efforts to provide consistent outreach and messaging, such as the 'Puget Sound Starts Here' campaign and other efforts through the Puget Sound Partnership (PSP), US Environmental Protection Agency (EPA), and other organizations, who may also prepare brochures and posters covering topics on surface water pollution. Information may be incorporated into the articles, or links can be provided with additional information available through their websites.

Planned Activities

- Ongoing – Identify topics for stormwater education inserts.
- Ongoing – Prepare inserts and information on a regular basis.

BMP 2(B): MAINTAIN AND UPDATE STORMWATER WEBSITE

Measurable Goals

1. Develop a list of subjects for inclusion and discussion on the stormwater website.
2. Track updates to the website each year.

Description

Since agency personnel, environmental group leaders, and the business community use the internet regularly, a website page and links to resources can be valuable tools in conveying stormwater pollution related information.

The following general topics will be addressed on the City's website:

- Non-point source pollution in stormwater including car wash runoff, pesticides, herbicides fertilizers and pet waste
- Proper handling of household hazardous wastes
- Information on private stormwater systems
- Links to other resources, such as instructions on rain barrel construction
- Individual Volunteer Opportunities

The following information will be included on the City's website:

- Contact information for the City's stormwater program
- Community Event and Volunteer Opportunity Announcements
- Recommended residential stormwater BMPs
- Links to State and National stormwater programs
- NPDES permit and Annual Report required by the permit
- The latest version of the SWMP and annual report
- Make hotline phone number public to allow residents to report spills and other illicit discharges.

Planned Activities

- Continue to review and update content and links on the stormwater website.

BMP 2(C): ENCOURAGE PROPER DISPOSAL OF HOUSEHOLD HAZARDOUS WASTES

Measurable Goals

1. Research local and regional opportunities for the public to properly dispose of household hazardous waste.
2. Develop an inventory of proper disposal events and opportunities based on research.

3. Create and distribute stormwater educational material dealing with hazardous materials disposal.

Description
Often, bad habits that lead to water pollution stem from the fact that citizens do not realize that certain chemicals are dangerous to the environment. It is anticipated that once citizens are informed, they will adjust their behavior to help protect water quality.

The City's website and brochures have made information available that is applicable to residential, commercial and industrial properties and address the following hazardous waste handling issues:

- Water quality impacts of improper storage, handling, and disposal
- Locations for proper hazardous waste disposal
- Reporting of illicit discharges
- Awareness of variety of hazardous materials including, pesticides, herbicides, paints, cleaning products, products containing mercury, fluorescent light bulbs, batteries, hobby chemicals, thinners and solvents, automotive products, aerosols, glues and adhesives and propane tanks
- Less-toxic alternatives to hazardous materials

Planned Activities
- Ongoing – continue to research or create and distribute stormwater information and/or links to such information discussing household hazardous waste management.
- Ongoing – Make available information for hazardous waste disposal events.
- Ongoing – Continue to provide household hazardous waste management brochures.

BMP 2(D): ADDRESS ILLEGAL DUMPING AND LITTERING

Measurable Goals
1. Install and track the number of additional trash bins, pet waste dispensers, and receptacles.
2. For recurrent illegal dumping incidents, install no dumping signs and distribute illegal dumping literature in the immediate area. Enforce litter ordinance as needed, using DuPont Municipal Code Title 6, Health and Sanitation.
3. Distribute and/or make available illegal dumping and littering education materials.

Description
Trash and floating debris in stormwater facilities and waterways have the potential to become significant pollutants, especially in areas where large volumes of trash are generated in a concentrated area. Trash in waterbodies detracts from the aesthetic qualities of the landscape, along with the potential for posing a threat to wildlife and human health. Less litter and waste debris from citizens may also save the City money for maintenance of structural-runoff controls.

Planned Activities
- Ongoing – Continue to maintain or install trash and pet waste bins and signs.

- Ongoing – Make available/distribute illegal dumping and littering educational materials.
- Ongoing – investigate any incidents or areas of illegal dumping and enforce the litter ordinance, especially in areas of concern.
- Ongoing- continue to have and promote waste reduction, cleanup campaigns, and related programs.

BMP 2(E): LAWN AND GARDEN CARE ACTIVITIES INFORMATION

Measurable Goals

1. Develop a list of subjects to be included in public education material addressing lawn and garden care practices.
2. Distribute and/or track the number of lawn and garden care education materials.

Description

Lawn and garden care activities can result in contamination of stormwater through pesticide, herbicide, soil, and fertilizer runoff. Proper landscape management, however, effectively reduces water use, contaminant runoff, and enhances the aesthetics of a property.

Information and resources made available on the City's website are planned to be applicable to residential, commercial and industrial properties, address the following general lawn and garden planning, and care issues:

- Planning and Design
  - Educate property owners on the benefits of developing a landscape plan that utilizes the natural conditions of a site including:
    - Regional and climatic conditions
    - Existing vegetation
    - Topography
    - Intended uses of the property
    - Water needs of plants
  - Promote natural vegetation choices to minimize water loss and contamination.
- Appropriate Plant Selection
  - Educate about the water efficiency and disease resistance of indigenous plant species.
  - Encourage property owners to choose local or regional plants to develop an environmentally friendly landscape.
- Use of Mulches
  - Educate about the water retention, weed growth reduction, erosion prevention and soil and plant growth improvements of mulch.
  - Encourage property owners to use mulches.
- Fertilizers
  - Educate property owners about over-application.
  - Discourage property owners from using fertilizers.
  - Recommend less-toxic alternatives, such as composted organic material.
- Pesticides/Herbicides
  - Educate property owners about the effects of pesticides and herbicides.
  - Identify any potential pests to determine if they are truly harmful to plants.

- Encourage the selection of hearty, native plants that require no pesticides.
- Encourage the removal of unwanted plants by removing them by hand.
- Discourage chemical pest control and weed control.

The City intends to continue working with the Pierce County Health Department and other agencies to identify content, information and resources sources when preparing the lawn and garden information and to make these resources available on the website.

Planned Activities

- Ongoing – Review topics and information or links available through the website.
- Work with Pierce County agencies or other agencies to conduct or provide information about available Natural Yard Care Workshops or similar classes for discussing lawn and garden activities and stormwater impacts, as these opportunities become available.

BMP 2(F): EDUCATION ON NEW DEVELOPMENT AND LOW IMPACT DEVELOPMENT (LID)

Measurable Goals

1. Review land use codes to ensure consistency with emerging LID principles.
2. Identify construction related subjects for inclusion in construction/new development public education materials that focus on local construction opportunity.
3. Distribute and/or make low impact development education materials available that are appropriate for the soil and topography of the City.
4. Post updated City's Public Works Standards on the website as occurs.
5. Post updated Development Standards on the City's website as occurs.
6. Track the number of LID Printed material distributed at events and City Hall.
7. Track the number of new site plans that incorporate LID principles and practices.
8. Track the number of City-owned facilities that are retrofitted with LID practices.

Description

Using LID approaches for new development will help to achieve stormwater pollution reduction goals by reducing stormwater runoff and pollution. The DMC will be reviewed so that LID practices can be integrated into the regulations. In order for these measures to be implemented, the City is informing the public about these practices through the City website. LID education material will be made available primarily through the website as it is developed.

The City will encourage the use of LID in new development with the following:

- Determine applicable LID BMPs in the planning stages of new projects.
- Identify maintenance requirements for applicable LID BMPs.
- Demonstrate LID BMPs at City-owned facilities (such as infiltrating roof drains).
- Inform developers about the potential cost savings of LID BMPs and their use as a marketing tool to attract environmentally conscious buyers.
- Educate property owners on effective pollution prevention measures.
- Encourage the proper maintenance of BMPs.

- Update the City Development Standards to include LID BMPs as appropriate.
- Allow convenient access to LID information on City's website.

Planned Activities

- Post updates to City's Public Works Standards on the City website.
- Review, distribute/make available info on LID related practices and standards.
- Ongoing – Develop and distribute educational material referring to LID codes on the website.
- Ongoing – Monitor the number of plans implementing LID practices and of any City facilities utilizing LID principles.
  Ongoing – Develop and add content to the website to educate the public on LIDs now they are effective pollution prevention BMPs.

BMP 2(G): Stewardship Opportunities

Continue creating stewardship opportunities and/or partnership with existing organizations. Stewardship opportunities and events are advertised on the City's Facebook and website. The City encourage residents to participate in activities such as:

1. **Storm Drain Marker Program:**
   The City offers the drain marker program to interested groups. In the past years, Boy Scouts have been the biggest volunteer group with this program. The City provides all the necessary tools to install drain markers.

2. **Volunteer Stream Team Monitoring :**
   The City partnered with Pierce Conservation District to offer volunteer opportunities for the stream team monitoring program. A flyer with a description of the program and extended invitation to the community was posted on the City's social media page (Facebook). Data collected during the monitoring program will be useful for the City to identify the current status of water quality in Sequalitchew Creek.

3. **Spring/Fall Community Cleanup Events:**
   In order to mitigate illegal dumping and littering, the City hosts bi-annual cleaning events. The City partners with Lemay Pierce County Refuse, Goodwill, and variable donation groups. This event gives an easy option for residents to properly dispose of materials or recycle unwanted items. Participants with items that cannot be taken are given information on how they can properly dispose of those items. The City is always looking for ways to increase what can be properly disposed of, recycled or reused (focusing when possible on recycling and reuse).

4. **Coordination with Adopt-a-a Street Program:**
   This program is open to individuals, local businesses, or organizations that are looking to contribute to the City and build civic pride in a litter-free community. Volunteers may adopt a section or sections of street blocks, trails, or parks.

5. **Park Appreciation Day:**
   Volunteers participate in the cleanup, mulching, and grooming of our local parks. The city provides the tools and materials necessary for this event.

6. **Stewardship Events:**
   The Parks and Recreation Stewardship events covered aspects of the region's ecosystem. Topics covered include: water cycle & hydrology, watershed, native plant habitats, threat from invasive plants, salmon habitat.

CHAPTER 3:
PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM

Involving the public in stormwater programs will encourage them to take ownership of the need to protect water quality. Public support is required for effective stormwater management program implementation. Opportunities are provided for participation and involvement through a variety of avenues including local public meetings, advisory councils, watershed committees, participation in developing rate-structures, and a variety of local and regional stewardship programs.

Public Involvement and Participation Program

1. As part of implementing Permit requirements, the City provides opportunities for the public to participate in a variety of aspects involved in the managing, implementing, and updates for the City's SWMP and SMAP. The City primarily provides for consideration of public comments through public meetings and web availability.
2. The City will continue to make their SWMP, annual report, and all other submittals required by this Permit, and other resources available by posting it on their website, no later than May 31 each year.

The City will continue to create opportunities for public involvement and participation:

- BMP 3(A): Post Public Involvement Opportunities

Objective: Provide opportunities for public involvement and participation.

BMP 3(A): POST PUBLIC INVOLVEMENT OPPORTUNITIES

Measurable Goal

1. Maintain updates to the City stormwater website (track substantial site updates).

Description

The City will post information about the following on its website:

- Public meetings and discussions on the City's SWMP and utility-related issues
- NPDES permit and Annual Report
- Volunteer programs, resources, and events

Planned Activities

- Continue to maintain, review and develop updates to the stormwater website.
- Ongoing – Topics will be added and updated.

CHAPTER 4:
MS4 MAPPING AND DOCUMENTATION

The permit section S5.C.4 requires the City an ongoing program for mapping and documenting the Municipal Separate Storm Sewer System (MS4). The minimum performance measures required are:

a. Ongoing Mapping
b. New Mapping

The City plans to implement the minimum performance measures as follow:

BMP 4 (A): Ongoing Mapping

Continue mapping the municipal stormwater system, including MS4 outfalls and discharge points, receiving waters (other than groundwater), stormwater treatment and flow control BMPs/facilities owned and operated by the City, tributary conveyance to all known outfalls and discharge points (24-inch diameter or larger), connections between other municipalities and public entities, an all connections authorized after February 16, 2007.

The City currently maintain an on-going program to keep updated an electronic map of the City MS4 and privately owned stormwater system.

BMP 4(B): New Mapping

The City will complete the following items:

- No later than January 1, 2020, begin to collect the size and material for all known MS4 outfalls.
- No later than August 1, 2023, complete mapping of all known connections from the MS4 to a privately owned stormwater system.
- No later than August 1, 2020, the required format for mapping is electronic (e.g. Geographic Information System, CAD drawings, or other software that can map and store polygons and associated attributes) with fully described mapping standards.

CHAPTER 5:
ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Ecology has developed final permit requirements for the illicit discharge detection and elimination program requirement of the State's NPDES Phase II permit program. The following program is based on these requirements and will continue to be implemented.

Illicit Discharge Detection and Elimination Program

a. The City has developed and implemented an ordinance intended to effectively prohibit non-stormwater, illegal discharges, and dumping into the MS4 to the maximum extent allowable under State and Federal law. The ordinance was required to be adopted no later than August 16, 2009, and has been incorporated into the stormwater code.
b. The City will continue to develop and implement programs to detect and address non-stormwater discharges, spills, illicit connections, and illegal dumping into the MS4. The program includes:
    i. Procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when they are suspected or identified.
    ii. Field activities to do visual inspections of priority outfalls and/or infiltration ponds, verify outfall locations, identify previously unknown outfalls, and detect illicit discharges.
    iii. Procedures for characterizing any illicit discharges reported to the City. These will include detailed instructions for evaluating the seriousness of the discharge.
    iv. Procedures for visual inspections. These would include opening manholes, using mobile cameras, and collecting and analyzing samples as may be applicable.
    v. Procedures for removing the source of discharge. These procedures will include notification of authorities and property owners, elimination of the discharge, follow-up inspections, and escalating enforcement and legal actions if the discharge is not eliminated. Termination of the connection will be verified within 180 days, using enforcement authority as needed.
c. The City will inform public employees, businesses, and the public of hazards associated with illegal discharges and improper disposal of waste.
d. The City will continue to develop and implement procedures for quick evaluation and assessment. Results will be tracked and published in future annual stormwater report.
e. Field staff trainings will be an ongoing part of implementing steps to appropriately identify potential problems and respond to reports of illicit discharges that may occur.
f. Program Record keeping. The City will use the WQWebIDDE portal to track and report on illicit discharges incident, spills and illicit connections.

The City will implement BMPs to detect and eliminate illicit connections during this and future permit cycles. The City will specifically address the following BMPs.

- BMP 5(A): Review Illicit Discharge Legal Authority and Ordinance
- BMP 5(B): Conduct Field Screening
- BMP 6(C): Identify Stormwater Hotspots

- BMP 7(D): Receive Training on Illicit Discharges
- BMP 5(E): Community Hotline

Objective: Establish and carry out procedures to identify and remove illicit discharges, and encourage public education and involvement in eliminating illicit discharges.

BMP 5(A): REVIEW ILLICIT DISCHARGE LEGAL AUTHORITY AND ORDINANCE

Measurable Goals

1. Review the related ordinances.
2. Revise the ordinances as changes in permit language or enforcement issues necessitate.
3. Develop supplemental provisions and/or legal authority as needed.

Description

The City first reviewed to determine if their existing codes relate appropriately to the prohibition of illicit discharges. The existing City of DuPont Municipal Code (DMC) contains regulations that prohibit illicit discharges and illegal dumping and authorizes enforcement actions on public and private property.

The following section of the DMC address illicit discharges

- 22.01.040(44) Definitions, Illicit Discharges
- 22.01.090(D) Illicit Discharges

The City revised the code in 2009 to ensure that the illicit discharge ordinance contains Ecology permit requirements and will review for any updates needed as noted earlier.

Current and Planned Activities

- Ongoing – Review existing codes and revise as necessary.
- Ongoing – Review codes for effectiveness as necessary.

BMP 5(B): CONDUCT FIELD SCREENING

Measurable Goals

1. Continue implementing and tracking field screening for an average 12% of the MS4 each year. The City does outfall inspection during spring and summer. The City used stormwater facility inspections as an opportunity to look for signs of illicit connections.

Description

Storm drain outfalls or pond inlets will be monitored to identify those areas where discharges that exceed water quality standards are occurring. Identifying potential illicit discharge sources may require both visual inspections for dry-weather discharges and potentially chemical analysis at selected areas. Field notes will be recorded on inspection forms and photographs taken as needed and retained for reference. If the outfall or pond inlet is not accessible, field crews will use the system map and identify the nearest point to assess the system. Staff will locate the storm sewer manhole closest to the

area of concern and remove the cover to identify signs of dry-weather flow, such as odor or residue. Field tests for possible contamination in dry-weather flows are listed below:

- Odor—Most strong odors, especially gasoline, oils, and solvents, are likely associated with high responses on the toxicity screening test.
- Color – The color of dry-weather discharges is an important indicator of inappropriate industrial sources. Industrial dry-weather discharges may be of any color, but dark colors, such as brown, gray, or black, are most common.
- Turbidity – Turbidity is affected by the degree of gross contamination. Dry-weather industrial flows with moderate turbidity can be cloudy, while highly turbid flows can be opaque. High turbidity is often a characteristic of undiluted dry-weather industrial discharges.
- Vegetation – Vegetation surrounding an outfall or inlet may show the effects of industrial pollutants. Irregular growth of vegetation may be the result of dry-weather potential illicit discharges.
- Floatable matter – Contaminated flow may contain floating solids or liquids directly related to industrial or sanitary wastewater pollution. Floatables of industrial origin may include animal fats, spoiled food, oils, solvents, sawdust, foams, packing materials, or fuel.
- Deposits and stains – Deposits and stains include any type of coating near the outfall or inlet, usually of a dark color.
- Damage to Outfall or Inlet Structures – Damage to outfall or inlet structures is another visible indication of potential industrial contamination. Severely contaminated discharges, usually of industrial origin, can cause the peeling of surface paint and the cracking, deterioration, and spalling of concrete at an outfall or inlet.

If indications of an illicit discharge exist, the Public Works Supervisor and Stormwater Specialist will be alerted and steps will be followed to identify and eliminate the source of the discharge. If other non-stormwater discharges are identified at an outfall or inlet, the source of the discharge will be investigated and a list of potential non-stormwater discharge sites within the basin will be matched to the type of discharge identified. Often times the source of the non-stormwater discharge will not be easily identified.

Current and Planned Activities

- Ongoing –Maintain outfall/discharge point inventory and update as development occurs.
- Ongoing – Conduct field screening and inspection program annually.
- Ongoing – The presence of illicit discharges identified or found will be addressed and tracked.

BMP 5(C): IDENTIFY STORMWATER HOTSPOTS

Measurable Goals

1. Identify local facilities that have a high probability of discharging pollutants (stormwater hot spots).
2. Monitor identified local facilities for any incidents of pollutant discharge.

Description
As development continues to occur within the community, the City will use the storm sewer system map as a tool to identify local businesses, both commercial and industrial, that have a high probability of causing illicit discharges. The system map will also be used to target areas with dry-weather flows or other types of suspicious discharges. These areas will receive more in-depth inspection and monitoring.

The City will prioritize inspection of sites based on land use types and work with other agencies in order to maximize the results of the inspections with the available time and funds associated with this BMP. The City will incorporate the following general EPA prioritization scheme into their illicit detection program:

1. Automobile-related businesses and facilities, and heavy manufacturing;
2. Printers, dry cleaners and laundromats, photo processors, utilities, paint stores, water conditioners, chemical laboratories, construction companies, and medium light manufacturing; and
3. Institutional facilities, private service agencies, retail establishments, and schools.

Current and planned Activities

- Monitor potential stormwater hot spots.
- Ongoing –Conduct inspections at stormwater hot spots, as appropriate.

BMP 5(D): RECEIVE TRAINING ON ILLICIT DISCHARGES

Measurable Goals

1. Maintain a list of personnel to be trained as turn over occurs.
2. Research and develop training materials and available classes.

Description
Field maintenance crews and construction and building inspectors will be trained in the detection and elimination of illicit discharges, and on the proper BMPs to use for the mitigation of these discharges. The ongoing classes will include various means to identify illicit connections and methods used to disconnect them from the stormwater system. Each person requiring this training should participate in at least one review or training for overview and instruction each year.

Current and Planned Activities

- Ongoing- Keep up to date a list of personnel to be trained.
- Ongoing – Continue training with field staff annually.
- Ongoing-Update training as needed and explore additional training opportunities as they become available.

BMP 5(E): COMMUNITY HOTLINE

Measurable Goals

1. Identify a phone number and contact person(s) to receive reports on stormwater quality issues

from the community.
2. Distribute information and continue to make a hotline number to the community.
3. The number of calls received by the hotline.
4. The number of inspections provided in response to calls from the public.

Description
A phone number is available to the public for reporting spills, dumping or other illicit discharges. The phone number is advertised through the City website and stormwater educational flyers and brochures. The City provided an electronic form on its website for the public doing denounce through website.

City staff will dispatch qualified water quality investigators to respond to complaints. The responsible party will be required to stop the action that is polluting the surface water. In addition, staff members will provide the violator with educational information on cleanup, alternative disposal options, erosion control, and other BMPs as approved by the City. Disciplinary action will be taken against polluters as described in the City's illicit discharge ordinance.

Planned Activities
- Continue to make available a phone number for the community hotline. This is currently provided through the City Hall Front Desk main phone line (253) 912-8121 and available Mon-Fri 8 am to 5 pm. For nights/weekends/holiday, the community hotline is 253-798-4721.
- Ongoing – Track the number of inspections performed in response to calls.

CHAPTER 6:
CONTROL STORMWATER RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT AND CONSTRUCTION SITES

The City has developed, implemented, and enforces a program to control stormwater runoff from new development, redevelopment, and construction sites to the MS4. This program is applied to all sites that disturb an area one acre or greater, including sites less than one acre that are part of a larger common plan. As part of the City's development regulations, the program applies to all development, private and public, including transportation projects. . Most of the new Phase II permit requirements for this section have implementation dates of June 30, 2022. The City will continue to implement its existing programs as required by previous permits until the scheduled updates.

Site Runoff Control Program

a. The program includes adoption of an ordinance addressing runoff from new development, redevelopment, and construction site projects one acre and larger. Other existing local requirements are applied to stormwater controls at smaller sites. The ordinance was required to be in place no later than August 16, 2009. It includes:
    i. The Minimum Requirements, technical thresholds, and definitions from Appendix 1 of the Permit.
    ii. A site planning process, and BMP selection and design criteria that aims to protect water quality, reduce discharge of pollutants, and apply all known, available and reasonable methods of prevention, control, and treatment (AKART) prior to discharge.
    iii. The authority to inspect private stormwater facilities that discharge to the MS4.
    iv. Provisions to allow non-structural preventive actions and source reduction approaches such as LID techniques and measures to minimize the creation of impervious surfaces and the disturbance of native soils and vegetation.
b. As part of the City's development regulations, the program includes a permitting process with plan review, inspection, and enforcement capability. The program is applied to all sites that are one acre or greater or part of a larger common plan.
c. The program includes provisions to verify adequate long-term operation and maintenance (O&M) of post-construction stormwater facilities and BMPs. These provisions reflect:
    i. Adoption of an ordinance that requires clearly identifying the party responsible for maintenance, requires inspection of facilities, and establishes enforcement procedures. This is accomplished through stormwater maintenance agreements.
    ii. The maintenance standards identified protect facility function. When an inspection identifies exceedances of the standard, maintenance will be performed.
    iii. Annual inspections of all stormwater treatment and flow control facilities unless maintenance records justify a different frequency.
    iv. Inspections of all new flow control and water quality treatment facilities for new residential developments within a larger common plan. Inspections are to be every six months during the period of heaviest house construction (i.e., one to two years following subdivision approval).

d. The program includes a procedure for keeping records of inspections, enforcement actions, and maintenance activities done by staff.
e. As part of implementing the program, the City makes copies of the "Notice of Intent for Construction Activity" and the "Notice of Intent for Industrial Activity" or information on where to access these available to representatives of proposed development projects.
f. The City will verify that all staff responsible for ongoing permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities.

The City implemented the following BMPs to address construction site run-off control:

- BMP 6(A): Develop and Update Legal Authority and Ordinance
- BMP 6(B): Conduct Construction Inspections
- BMP 6(C): Review Site Plans for New and Redevelopment
- BMP 6(D): Conduct Post-Developed Inspections
- BMP 6(E): Provide Training for Personnel
- BMP 6(F): Identify Sensitive Water Bodies and Protective Measures
- BMP 6(G): Encourage Low Impact Development

Objective: Upgrade the set of development requirements for erosion and sediment control at construction sites per the City's adopted ordinance. This includes planning, installation, inspection, maintenance, and enforcement of development practices.

BMP 6(A): DEVELOP AND UPDATE LEGAL AUTHORITY/ORDINANCES

Measurable Goal

1. Identify any regulation areas not addressed within the current ordinance and revise if necessary.

Description

The City currently has regulations that require applicants for construction projects to plan for and implement erosion control practices and describe the inspection and enforcement authority of the City. The City will ensure that the erosion and sediment control ordinance(s) include all sufficient stormwater pollution prevention elements to prevent pollution resulting from erosion and sediment runoff during the construction phase, and an adequate inspection and enforcement plan to ensure compliance with the ordinance.

The following sections of the DMC regulate construction run-off control measures:

- 22.01.090(b) General Requirements – Best Management Practices
- 22.01.100 Approval Standards – New Development
- 22.01.110 Approval Standards – Redevelopment
- 22.01.200 Minimum Stormwater Requirements for New Development and Redevelopment

The City's ordinance references the adopted Ecology manual for details on appropriate BMPs. The City intends to provide erosion and sediment control techniques on its stormwater website that owners

of construction sites would be allowed to use. The EPA has developed the National Menu of Best Management Practices which is available at https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu

The ordinance also incorporates an enforcement plan that includes enforcement procedures against inadequate construction erosion and sediment controls.

For developed or redeveloped sites, the City currently has regulations that establish the minimum level of compliance that must be met to permit a property to be developed or redeveloped.

The ordinance also allows for structural and non-structural BMPs and implements standards to ensure long-term operation and maintenance of the BMPs. The maintenance schedule will comply with the NPDES Phase II Permit requirements. The City currently has maintenance agreements in place for all privately-owned and maintained stormwater BMPs. Record keeping of all inspections and maintenance will be performed as well.

Current and Planned Activities

- Continue to identify changes in regulations not addressed in the current ordinance and revise as necessary.
- Ongoing – Maintain and implement the stormwater regulations and programs.

BMP 6(B): CONDUCT CONSTRUCTION INSPECTIONS

Measurable Goals

1. Conduct construction site inspection before, during and post construction.
2. Frequency of inspection for compliance with construction site erosion/sediment controls and maintenance of installed BMPs.
3. Maintain inventory of inspection activities.
4. Review of the ordinance for site inspection requirements.
5. Number of compliance letters, or other enforcement actions.

Description

Inspections are necessary to ensure that erosion and sediment controls are properly installed and maintained and that the site plan reflects changes made on-site (e.g. different types of controls used and changed location of controls). To minimize the amount of staff needed for this BMP, erosion control inspectors may include building inspectors and/or other staff or consultants working with Public Works. Frequent and consistent inspections are the key to ensuring proper installation and maintenance of erosion and sediment controls. The frequency for inspection of construction sites will be determined by the City but, at a minimum, will include at least one inspection during each phase of a project (initial, during, and after construction). More frequent inspections may be required during wet weather months.

Inspections will be prioritized based on the following:

- Construction sites on steep slopes or highly erodible areas

- Construction sites operated by contractors with past violations
- Construction sites disturbing more than one acre and/or
- Construction sites in operation during rain events

Current and Planned Activities

-
- Ongoing – Ensure construction inspections occur on each development or re-development site.
- Ongoing – Maintain ongoing inventory of inspection activities.

BMP 6(C): REVIEW SITE PLANS

Measurable Goals

1. Number of plans reviewed.

Description

Currently, the contracted City engineer in coordination with staff reviews construction plans to ensure that they include the required stormwater controls, erosion and sediment controls, and post construction controls required by City codes.

All construction sites, small and large, are required to control erosion and sedimentation from construction activities and to apply approaches to treatment and flow control of stormwater runoff from the developed site. All plans for sites disturbing at least one acre (or if less than one acre and part of a planned development) to verify the following factors:

- Erosion and sediment controls consistent with City codes and control requirements.
- The construction operator is aware of his responsibility for implementing and maintaining erosion and sediment controls and is aware of the penalties for failing to do so.
- Post-construction controls consistent with the City codes are clearly described on the plan and are sized appropriately.
- The construction operator and landowner are aware of the responsibility for implementing and maintaining the post-construction controls and of the penalties for failing to do so.

A pre-construction site plan meeting with the construction supervisor(s) and operator(s) is typically required for each project to ensure that all parties are comfortable with the site plan and its requirements.

Planned Activities

Ongoing – Review plans prior to construction.
Ongoing – Develop and keep up to date a reviewer's checklist.
Ongoing – Track the number of reviewers and the number of plans reviewed.

BMP 6(D): CONDUCT POST-DEVELOPED INSPECTIONS

Measurable Goals

1. Development or use of consistent inspection forms or practices.
2. Frequency of inspection for compliance with installed BMPs.
3. An inventory of inspection activities created, maintained annually.
4. Review of ordinance for site inspection requirements.
5. Number of compliance letters.

Description

Inspections are necessary to ensure that permanent water quality controls are properly installed and maintained even after construction is complete. Post-development construction site inspections occur no later than one year following the completion of the project.

Planned Activities:

- Ongoing – Review post-construction inspection forms, as needed.
- Ongoing – Maintain compiled inventory of inspection activities.
- Ongoing – Conduct post-construction inspections annually.
- Ongoing – Track the number of inspectors, compliance letters written or enforcement actions taken, and the frequency of inspections.
- Ongoing – Review the City ordinances and, if necessary, revise post-construction site inspection requirements.

BMP 6(E): PROVIDE TRAINING FOR PERSONNEL

Measurable Goals

1. Develop and maintain a list of personnel to be trained.
2. Number of trainings, reviews, or instructional days for staff.

Description

City inspectors and appropriate public works staff will have CESCL certifications and/or be familiarized in the required erosion and sediment control BMPs for stormwater runoff from construction sites. Each person requiring this training will participate in erosion control reviews or attend at least one day of instruction for recertification each year.

Course information for these training programs and others is typically available at the web addresses below:

AGC Education Foundation
http://constructionfoundation.org/classes/calendarUniversity of Washington's Engineering Professional Program
https://www.engr.washington.edu/departments/inbriefInternational Erosion Control Association
http://www.ieca.org/
Eco-3

http://www.eco-3.com

Current and Planned Activities

- Ongoing – CESCL trainings have been provided to appropriate public works staff.

BMP 6(F): IDENTIFY SENSITIVE WATER BODIES AND PROTECTIVE MEASURES

Measurable Goals

1. Identify sensitive water bodies within the jurisdiction.
2. Review develop guidelines for permitting development projects near sensitive areas.
3. Review zoning in sensitive areas and revise if necessary.
4. Review and revise critical area requirements/buffers in relation to sensitive areas.

Description

Sensitive water bodies play a crucial part in the health of an overall stormwater system. Sequalitchew Creek flows through the City of DuPont into the southern portion of Puget Sound.

Planned Activities

- Ongoing – Coordinate with the planning department to review and revise, if necessary, land use and development regulations in the vicinity of Sequalitchew Creek.

BMP 6(G): ENCOURAGE LOW IMPACT DEVELOPMENT (LID)

Measurable Goals

1. Review land use codes to ensure consistency with LID principles.
2. Identify construction related subjects for inclusion in construction/new development public education materials that focus on local construction.
3. Distribute development education material as it is available.
4. Number of new site plans with LID practices.

Description

As indicated with BMP 1(F), using low-impact development approaches for new development can help to achieve stormwater pollution reduction goals. Through LID approaches, stormwater runoff can be controlled while development objectives are achieved. Soil types found in the City of DuPont are conducive to infiltration and the use of LID approaches that rely on infiltration. The City will also encourage LID practices, such as minimization of impervious surfaces that may be appropriate. In order for these measures to be implemented, the City will inform the public about potential LID practices and the establishment of an outreach program as described for BMP 1(F).

Current and Planned Activities

- Ongoing – Track workgroups and agencies working to develop LID technologies and standards and make appropriate LID education material available.
- Ongoing – Revise the City codes to include/promote LID as necessary.
- Ongoing – Assess the effectiveness of LID opportunities, techniques, and programs.

CHAPTER 7:
MUNICIPAL OPERATIONS AND MAINTENANCE (O&M) PROGRAM

The City will implement an O&M program that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Areas of municipal operations that will be generally targeted for preventing or reducing pollutant potential include:

- Streets, parking lots, right-of-ways, and vehicle maintenance and storage areas;
- Stormwater treatment and flow control facilities;
- Parks and open space areas.

Site Runoff Control Program

a. Program and maintenance standards are described below.
    i. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facilities required condition at all times between inspections. Exceeding the maintenance standard between inspections and/or maintenance is not a permit violation.
    ii. Unless there are circumstances beyond the City's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:
        - Within 1 year for typical maintenance of facilities, except catch basins.
        - Within 6 months for catch basins.
        - Within 2 years for maintenance that requires capital construction of less than $25,000.

    Circumstances beyond the City's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the City shall document the circumstances and how they were beyond their control.
b. Conduct annual inspections of all municipal treatment and flow control facilities and take appropriate actions in accordance with the adopted maintenance standards. The frequency of inspections may be reduced if justified.
c. Spot check potentially damaged facilities following major storm events and take appropriate action if there is damage identified.
d. Develop a program to inspect all catch basins and inlets, to be implemented before the end of the Permit term.
e. Establish and implement BMPs to reduce stormwater impacts associated with runoff from streets, parking lots, roads, and road maintenance activities.

f. Establish and implement BMPs to reduce pollutants in discharges from all municipal lands, including but not limited to: parks, open space, right-of-ways, maintenance yards, and stormwater treatment and flow control facilities.
g. Develop and implement an on-going training program for City employees whose construction, operations, or maintenance job functions may impact stormwater quality.
h. Develop and implement an SWPPP for all heavy equipment maintenance and storage yards, and material storage facilities owned or operated by the City but not covered under the Industrial Stormwater General Permit.
i. Maintain records of inspections and maintenance or repair activities done as part of this program.

The City plans to implement the following BMPs to address pollution prevention.

- BMP 7(A): Review/update O&M Program and O&M Standards
- BMP 7(B): Review/update the Stormwater Pollution Prevention Plan (SWPPP).
- BMP 7(C): Proper Pesticide and Herbicide Application
- BMP 7(D): Landscaping and Lawn Care (Waste Reduction)
- BMP 7(E): Roadway Maintenance
- BMP 7(F): Street Sweeping
- BMP 7(G): Catch Basin Cleaning
- BMP 7(H): Identify and Investigate Illegal Dumping Locations
- BMP 7(I): Litter Collection
- BMP 7(J): Provide Employee Training

Objective: Promote pollution prevention and good housekeeping measures.

BMP 7(A): REVIEW/UPDATE O&M PROGRAM AND O&M STANDARDS

Measurable Goals

1. Review/update City O&M Standards.
2. Number of measures in the plan implemented.

Description

An O&M program that discusses good housekeeping procedures is essential to ensuring that all City activities and programs impacting stormwater are implemented efficiently and effectively. The program will be periodically reviewed and updated and includes:

a. The training of municipal employees in facility maintenance and good housekeeping practices in order to minimize stormwater pollution;
b. The training of municipal employees in the proper methods for disposal of solid and liquid wastes from maintenance activities;
c. The development and implementation of a maintenance schedule; and
d. The production of an evaluation to measure the program's effectiveness.

Current and Planned Activities

- Ongoing – Review and update O&M program to address operational changes.

BMP 7(B): REVIEW/UPDATE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Measurable Goals

1. Review/update the SWPPP.
2. Number of measures in the plan implemented.

Description

The SWPPP is intended to reduce the amount of pollutants carried by stormwater runoff into the storm drainage system. It is comprised of a description of procedures and associated schedules for municipal activities and includes:

1. A site or project description;
2. A description of stormwater BMPs that may be appropriate for municipal operations;
3. A description of the site specific BMPS:
4. A BMP implementation schedule;
5. The identification of a Pollution Prevention Team that is responsible for implementing BMPs;
6. A description of a site inspection and monitoring activities; and
7. A log element that can be used to track all construction activities or reports.

Municipality Facility Activity	Potential Pollutants								
	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides, herbicides, Insecticides	Oxygen Demanding Substances
Building and Grounds Maintenance and Repair	X	X	X	X	X	X	X	X	X
Parking/Storage Area Maintenance	X	X	X	X	X	X	X		X
Waste Handling and Disposal	X	X	X	X	X	X	X	X	X
Equipment Fueling			X	X		X	X		
Vehicle and Equipment Maintenance and Repair				X		X	X		
Vehicle and Equipment Washing and Steam Cleaning	X	X	X	X		X	X		
Outdoor Loading and Unloading of Materials	X	X	X	X		X	X	X	X
Outdoor Container Storage of Liquids		X		X		X	X	X	X
Outdoor Storage of Raw Materials	X	X	X			X	X	X	X
Outdoor Process Equipment	X		X	X		X	X		
Landscape Maintenance	X	X	X		X			X	X
Source: California Stormwater BMP Handbook (http://www.cabmphandbooks.com/)(slightly modified)									

BMPs for the City's facilities will reduce the amount of pollutants that enter the stormwater from the day-to-day operations of the City. Potential source activities and the potential pollutants released by these activities are summarized in the table below.

In the case that any of these pollutants spill and require cleanup, the following BMPs should be used as a general guide for safe and effective cleanup of the area:

- Dispose of dry cleanup materials promptly after use;
- Develop and post procedures for spill response and cleanup;
- Post a facility drainage map to show areas with potential for spills, the direction of stormwater flow, and location of spill response equipment;
- Designate a person for spill response cleanup responsibility;
- Assemble spill containment and cleanup kits, such as biobag kits;
- Train employees on spill control procedures;
- Promptly clean up spills and notify appropriate persons; and
- Distribute procedures for spill response and cleanup to applicable facilities.

The SWPPP serves as a reference manual for all City employees that are in any way involved in stormwater management. To fully implement the program, training for City staff will be focused on the information contained within the SWPPP and general BMPs.

Planned Activities

- Ongoing – Review, update, and implement the SWPPP. Ensure that City staff is aware of the SWPPP and its uses.

BMP 7(C): PROPER PESTICIDE AND HERBICIDE APPLICATION

Measurable Goals

1. Develop an inventory of areas designated for herbicide and pesticide application.
2. Meet local, state, and federal regulations associated with pesticide application.
3. Assess and prioritize the potential use of alternative pesticide practices.

Description

The use of herbicides and pesticides is a matter of environmental concern. They have the potential to end up in drinking water and other aquatic systems if not managed properly. Before City staff applies these types of chemicals, the manufacturer's instructions and material safety data sheet for each chemical should be reviewed. Records of the amount, date, and concentration will be required for all pesticide and herbicide application. An annual review of the types of pesticides and herbicides used and the purpose of their application will be used in determining ways to reduce the amount, concentration, and frequency of pesticide use in the City.

When appropriate, the City will implement the following BMPs:

- **Inclement Weather** – Weather conditions can adversely affect the efficiency of chemical treatments. If wind or rain is imminent, the City will reschedule planned pesticide application in order to avoid unnecessary contamination of runoff.
- **Runoff Control** – Storm drains that could be potentially impacted by runoff of pesticide will be located and covered during treatment.
- **Drift Control** – The City will limit the use of power sprays to reach the upper canopy of trees

if used to prevent pesticide drift into buildings and water bodies. Alternative control measures such as the injection of systemic insecticides will be promoted.

- **Preventative Applications** – Dormant oils and herbicides will only be used on shrubs and trees if justified by the existence of potential pest outbreaks. Notification and posting during application of lawn pesticides will be conducted.
- **Application of Rodenticides** – Anticoagulants, tracking powders, and other mammalian toxicants if uses will be placed in locations that will not result in their translocation to aquatic habitats.
- **Application of Termiticides into the Ground** – The application of termiticides will not be permitted near wells, streams, or other water sources.
- **Transportation of Pesticides** – Pest control vendors will be required to comply with the following provisions during transportation:
    - Containers will be kept securely sealed;
    - Containers will be securely fastened to the vehicle;
    - Pesticides will not be left in an unattended vehicle unless the vehicle has an enclosed storage area and is kept locked in that storage area;
    - Pesticides spray tanks that are transported will:(a) be securely sealed; (b) form part of or be permanently fixed to the vehicle using the pesticide, if so applied; and (c) be prominently marked either "WARNING" OR "POISON", and the name of the pesticide product, and;
    - Vehicles, if used for pest control, will: (a) be designed so pesticide is separated from the driver or operator by a barrier impervious to the pesticide; (b) not be left on public land when not in use; (c) be securely housed to restrict public access when not in use; and (d) be washed down on a grassed area in such a way that no runoff is allowed into the stormwater or sewage system.
- **Pesticide Storage** – Pesticide containers will always be kept in covered storage areas that are covered or have some form of secondary containment to protect from stormwater contamination.
- **Pesticide Spills** – A pest control operator who observes any accident or spillage of pesticide will report it to the City as soon as possible.
- **Pesticide Disposal –** Once application of the pesticide is finished, the containers will be rinsed thoroughly and the rinse used on the intended target, so that no amount of the pesticide is unaccounted for. Empty containers will be disposed of as hazardous waste, in accordance with instructions on the product's label.

Current and Planned Activities

- Trained staff member(s) review and maintain an inventory of pesticide and herbicides and uses.
- Ongoing – Monitor pesticide and herbicide on an annual basis.
- City Grounds Maintenance staff to obtain and renew State of Washington Public Applicators License.
- The City is updating their Integrated Pest Management Plan in 2020.

BMP 7(D): LANDSCAPING AND LAWN CARE (WASTE REDUCTION)

Measurable Goals

1. Develop an inventory of landscaping and lawn areas requiring care.
2. Implement practices for open spaces and maintenance at all parks.

Description

The City will implement BMPs for landscaping and lawn care practices that will reduce the impacts of nutrient loading from stormwater. Nutrient loading generated by lawns has the potential to cause eutrophication in streams, lakes, and estuaries and should be reduced whenever possible.

The City will limit fertilizer and pesticide use and may implement alternative landscaping where practical. Alternative practices such as installing native plants at borders of maintained areas can help reduce reliance on water and fertilizer.

Current and Planned Activities

- Ongoing-An inventory of landscaped and lawn area was developed in 2017 in conjunction with a maintenance contract. The inventory will be updated as needed.
- Ongoing – Review areas where lawn care and landscaping occurs and use BMPs.

BMP 7(E): ROADWAY MAINTENANCE

Measurable Goals

1. Develop an assessment of current maintenance procedures.
2. Identify alternative practices for reducing road materials needed for construction or maintenance activities.

Description

The City will continue to assess current roadway maintenance activities to determine if adoption of more contemporary practices would benefit stormwater quality. Existing roadway maintenance specifications have been reviewed and revised to reflect the most up to date BMPs.

Planned Activities

- Ongoing – Assess roadway maintenance procedures and revise, if necessary.

BMP 7(F): STREET SWEEPING

Measurable Goals

1. Update schedules for street sweepings.
2. Quantity of material removed per curb or lane mile.

Description

The City will update the schedule of street sweepings. Street sweepings assist in preventing pollutants from entering the City's stormwater system or receiving waters downstream. The street sweeper is also assisting in promote the City's Stormwater message. The street sweeper prominently displays the

stormwater logo on multiple sides of the vehicle. Records of the distances swept and quantity of materials removed from roadways will be monitored and may be referenced in SWMP updates.

Timeline for Completion

- Ongoing – Maintain a progressive, preventative street sweeping schedule.

BMP 7(G): CATCH BASIN CLEANING

Measurable Goals

1. Identify catch basins to be cleaned or inspected.
2. The number of catch basins cleaned or inspected.
3. The amount of trash, sediment, and other pollutants removed during cleaning.

Description

The City will continue to perform catch basins inspections and cleaning once every two years. In 2020, the City will inspect and vactor clean all public owned catch basins. Inspection records are kept and updated in the City's GIS system.

The following general catch basin maintenance activities have been implemented:

- Inspect catch basins and inlet structures to ensure:
  - Immediate repair of any deterioration threatening structural integrity;
  - Sumps are cleaned before they are 60% full and in no case less than a minimum of 6 inches clearance from the sediment surface to the invert of the lowest pipe.
  - Catch basins and inlets can be marked and/or information available to remind the public that dumping of waste into storm drains is not allowed.
- Keep updated records for basins as they are inspected and cleaned.
- Store wastes removed from the drainage system in appropriate containers or transfer to appropriate disposal sites to prevent discharge into the storm sewer.

Timeline for Completion

- Ongoing – Maintain catch basins, recording conditions, and cleaning schedules.

BMP 7(I): LITTER COLLECTION

Measurable Goals

1. Identify high litter accumulation areas based on land use; revise as necessary.
2. Create a preliminary collection schedule for areas where litter tends to accumulate.

Description

Litter adds pollutants to the City's stormwater system and should be controlled to the greatest extent possible. The City has a routine schedule of litter collection at all parks, dog waste stations, and trails. Additionally, staff will collect litter found on streets via the City's street sweeper or pick up individually. During high occupancy events at parks, such a holiday celebration, additional trash cans will be placed in the park in coordination with the City's solid waste collector.

Current and Planned Activities

- Ongoing – Continue litter accumulation areas and collection schedule.

BMP 7(J): PROVIDE EMPLOYEE TRAINING

Measurable Goals

1. The number of trainings or training hours for staff.

Description

The City will continue to ensure that employees in stormwater, streets, landscaping, and maintenance related positions are trained on the requirements of the stormwater pollution prevention and good housekeeping program and standard operational practices.

The general training program incorporates the following measures:

- Proper maintenance activities, including record keeping and disposal;
- Handling of hazardous materials and waste;
- Recognizing and reporting illegal dumping;
- Educating businesses, contractors, and the general public in proper and consistent methods for waste disposal; and
- Recognizing and reporting non-stormwater discharges via illicit connections.

The City will also ensure that its employees have access to public education materials produced as part of this permit so that they may implement practical, effective and feasible BMPs into their day-to-day work.

Planned Activities

- Ongoing – Develop and provide trainings and reviews of best practices and good housekeeping measures and track topics, employee trainings or training hours.

CHAPTER 8:
SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT

The Implementation of the source control program for existing development is required to prevent and reduce pollutants in runoff from areas that discharge to the MS4. This is a new permit requirement introduced in the 2019-2024 NPDES Phase II permit.

The City will plan and develop this program during 2020 and 2021. The City will implement it no later than first implementation deadline on August 1. 2022.

CHAPTER 9:
MONITORING AND ASSESSMENT
(REGIONAL APPROACH)

The Implementation of the source control program for existing development is required to prevent and reduce pollutants in runoff from areas that discharge to the MS4. This is a new permit requirement introduced in the 2019-2024 NPDES Phase II permit.

The permit section S8 requires the City to conduct monitoring/assessment in the following two categories:

a. Regional Status and Trends Monitoring
b. Stormwater Management Program (SWMP) Effectiveness and Source Identification Studies

To meet these requirements the City had chosen and notified the Department of Ecology the following options:

a. Make annual payments into collective fund to implement regional receiving water status and trends monitoring of small streams and marine nearshore area in Puget Sound. The annual payments into the collective fund are due on or before August 15 each year beginning 2020. Payment should be submit according to permit section S8.D.
b. Make annual payments into a collective fund to implement effectiveness and source identification studies. The annual payments into collective fund are due on or before August 15 each year beginning in 2020.

CHAPTER 10:
REPORTING REQUIREMENTS

As with the other elements, Ecology developed permit requirements for the NPDES Phase II reporting requirement. The following program is based on DOE's 2019 permit reissuance requirements Permittees are to submit, no later than March 31st of each year (as of 2019), an annual report. The reporting period for each required annual report shall be the previous calendar year.

Reporting Requirement.

A. No later than March 31 of each year beginning in 2020, each Permittee shall submit an annual report. The reporting period for the annual report will be the previous calendar year unless otherwise specified.

   Permittees shall submit annual reports electronically using Ecology's Water Quality Permitting Portal (WQWebPortal) available on Ecology's website.

   Permittees unable to submit electronically through Ecology's WQWebPortal shall contact Ecology to request a waiver and obtain instructions on how to submit an annual report in an alternative format.

B. Each Permittee is required to keep all records related to this Permit and the SWMP for at least five years.

C. Each Permittee shall make all records related to this Permit and the Permittee's SWMP available to the public at reasonable times during business hours. The Permittee will provide a copy of the most recent annual report to any individual or entity, upon request.

   1. A reasonable charge may be assessed by the Permittee for making photocopies of records.

   2. The Permittee may require reasonable advance notice of intent to review records related to this Permit.

D. The annual report for cities, towns, and counties
   Each annual report shall include the following:

   1. A copy of the Permittee's current SWMP Plan, as required by S5.A.2.
   2. Submittal of the annual report form as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of this Permit during the reporting period.
   3. Attachments to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this Permit during the reporting period, or as a required submittal. Refer to Appendix 3 for annual report questions.31
   4. If applicable, notice that the MS4 is relying on another governmental entity to satisfy any of the obligations under this Permit.
   5. Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
   6. A notification of any annexations, incorporations or jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period.

E. The City of DuPont will develop an annual report to meet these guidelines.

Objective: Prepare an annual report on effectiveness of Stormwater Management Program.

BMP 10(A): ANNUAL STORMWATER MANAGEMENT PROGRAM REPORT

Measurable Goal

1. Annual report prepared.

Description

The City will compile required annual report, per the permit requirements noted earlier.

Timeline for Completion

- Ongoing – Submit report annually no later than March 31.