



STORMWATER MANAGEMENT PLAN

2011



Prepared by
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OVERVIEW

The City of Normandy Park Stormwater Management Plan was prepared to guide the City in planning, funding and implementing a comprehensive program for addressing current and future regulatory and policy requirements for managing stormwater runoff, and the City's natural resources. The City's stormwater program currently consists of many separate programs, conducted by the Public Works and Planning Departments. These programs are typically implemented to respond to regulatory requirements, the need for public services and safety, and the City's commitment to protect and improve the quality of its natural resources. Examples include capital improvement projects for stormwater and flood control, maintenance of public stormwater systems, resource monitoring of streams to assess and respond to water quality problems, private stormwater facility inspection, and public involvement and education.

The purpose of the Stormwater Management Plan is to comprehensively address how to meet the many different but related regulations, adopted plans and programs, and policies that affect urban stormwater, flooding and associated water resources. Because many of these requirements from different sources affect the same activities, an overall stormwater plan is needed to address the interrelationships of the programs and efficient approaches for meeting requirements and implementing policy, consistent with long-term goals, objectives and policies as outlined in the City of Normandy Park Comprehensive Plan.

REGULATIONS

Many Federal, State, and Local laws and codes pertain to stormwater issues. Below is a brief summary of some of the main regulations which pertain to stormwater.

CLEAN WATER ACT (CWA) HISTORY

1899 Rivers and Harbors Act

1972 Clean Water Act

1977 CWA amendments address toxics released to sewers and surface waters

1987 NPDES (National Pollution Discharge Elimination System) Stormwater program established to control non-point pollution

CWA SECTION 402

- NPDES Stormwater Phase II permits required for all small Municipal Separate Stormwater Sewer Systems (MS 4's) with a population over 1,000 people
402 p(3)(B) of CWA requires all discharges into storm sewers or surface waters to reduce pollutants to the Maximum Extent Possible (MEP)

CWA SECTIONS 505 & 510

- 505 allows citizens' suits and attorneys fees to prevailing, or substantially prevailing party
- 510 clarifies that states can adopt and enforce Water Quality (WQ) standards and controls, provided that state standards cannot be less stringent than federal standards

STATE WATER QUALITY REGS

- RCW 90.48--Water Pollution Control Act
- Department of Ecology (DOE) designated state CWA agency
- WAC 173-201A--Surface WQ Standards
- WAC 173-220--NPDES Program
- WAC 173-226--Waste Discharge General Permit Program

NORMANDY PARK MUNICIPAL CODE

- NPMC Title 13 Environment
- NPMC Title 9 Flood Hazards
- NPMC Title 14 Building Code
- NPMC Title 16 Shoreline Management

Policies provide official guidance on approaches and likely courses of action for meeting City goals, objectives, and obligations. Current Municipal Code lays out general requirements for stormwater management and adopts the 2005 Stormwater Management Manual for Western Washington as its primary design manual. The City also utilizes the City of Normandy Park Small Project Drainage Requirements and Technical Guidance Manual, as well as the PSAT Low Impact Development Manual. Programs and projects that are referenced in the Stormwater Management Plan are consistent with the policies of the City Comprehensive Plan.

NPDES PHASE II PERMIT REQUIREMENTS

NPDES Permit Compliance Status

A Notice of Intent (NOI) to comply with the NPDES Phase II Western Washington Municipal Stormwater Permit was sent to DOE in March 2003.

Notice of Coverage

A Notice of Coverage letter was received from DOE in January of 2007 identifying that the City was now covered under Permit No. WAR04-5534

SWMP Development

One of the permit requirements is for municipalities to develop and implement a Stormwater Management Program (SWMP). A SWMP, as described in the NPDES Permit, is a planning tool used to describe a municipality's current implementation of the permit, as well as plans for implementing additional program elements. A SWMP is a living document that will be updated annually.

Public Participation

The City encourages public comment and participation in the development and implementation of the SWMP. We plan to utilize the following venues in an effort to keep our residents informed on the progress of the SWMP, so they can provide comments and input as the SWMP develops: 1) The City web page; 2) The City's newsletter; 3) Public Notices in local newspapers; and 4) Public Meetings – Open Houses/Workshops and City Council Meetings.

STORMWATER MANAGEMENT PLAN

The City of Normandy Park Storm Water Utility is well established with an existing surface water utility rate structure and some of the NPDES Phase II Permit program elements already in place. The Stormwater Management Program being developed includes the following elements:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping

Each of these elements are discussed in detail on the following pages.

1. Public Education

The City of Normandy Park is implementing a Public Education and Public Involvement Program. We use a variety of approaches to inform residents and businesses about stormwater pollution prevention, the Capital Improvement Program, watershed planning and maintenance activities, engaging both citizens and other stakeholders.

We believe that public education is an integral part of protecting our water resources. It is our goal to increase water quality compliance by helping people realize their individual and collective responsibilities for protecting our waterways. An informed community can be a great deal more effective at keeping a watchful eye on our waterways than a few members of city staff.

Public Education Programs:

The City has implemented several education programs to address the following issues:

Natural Yard Care

These informative workshops provide residents with the information and tools they need to adopt environmentally friendly yard care techniques, such as Smart Watering, Composting/Mulching and Alternatives to Fertilizers and Pesticides. This work is coordinated with our Basin Steward program

Car Washing

Even biodegradable soaps are toxic to aquatic life and unlike our sanitary sewer system, water that runs into our storm drains flows directly to our lakes, streams and wetlands with little to no treatment. The program includes education and providing free use of a car-wash kit which pumps water from a catch basin into the sanitary sewer or grassy area for absorption.

Shoreline Stewardship Booklet

This public education booklet outlines the natural processes and functions of the Puget Sound shoreline and describes environmental friendly techniques on topics like beach access, landscaping and shoreline erosion protection. The booklet was provided to the City courtesy of the Puget Sound Action Team.

Shoreline Property Owners Workshops

King conservation District Shoreline property owners program is an established program on its fifth year of operation. The program includes three King County area weekend workshops, and individual site visits by District staff. The workshops cover Marine ecology, coastal processes, best management practices and engineering, and native planting information

2. Public Involvement Programs

Volunteers are an important part of our stormwater pollution prevention program. Below are some of the programs the City is developing as a part of the Stormwater Management Plan.

Storm Drain Marking Program

To increase the public awareness of stormwater pollution and their path to waterbodies, the City will be implementing a Catch Basin Marker Program. Through this program partnerships with organizations such as Scout groups will help to mark storm drain inlets or catch basins with stencils and paint.

Basin Steward Program

Thanks to a partnership of local governments, residents in the Miller and Walker Creeks basin will have more help in taking care of streamside habitat and cleaning up stormwater. Dennis Clark is the-time stream basin steward for the creeks, which drain nine square miles of Burien, Normandy Park, SeaTac, and White Center. The basin steward will serve as a resource for citizens who want to improve native vegetation along the creeks, decrease stormwater runoff from their property, and reduce stormwater pollution. Homeowners and businesses can request free consultations to learn what they can do to help improve the local aquatic ecosystem. Contact Dennis Clark at 206-296-1909 or dennis.clark@kingcounty.gov.

The basin steward is also available to give presentations to classrooms, community groups, and faith communities on stream resources and tips for everyday stewardship. The basin steward activities are paid for through a partnership of the cities of Burien, Normandy Park, and SeaTac; King County; and the Port of Seattle. The stewardship services are provided by King County under contract. Creation of basin steward was recommended in the Miller and Walker Creeks Basin Plan. The plan, which was completed in 2006, recommended a series of actions to address stormwater and habitat problems in the basin.

Noxious Weed Control

Noxious weeds are non-native plants that have been introduced accidentally or as ornamentals. They spread quickly, displacing desirable plant species and destroying native habitat important for good water quality. Through the years, the City of Normandy Park has partnered with volunteer groups on numerous projects to remove noxious weeds along critical waterways. These revegetation efforts have enhanced the aquatic habitat of our local streams, thus improving water quality.

3. Illicit Discharge Detection and Elimination

The City of Normandy Park is in the process of developing programs to address illicit discharge issues in the city. Several important elements of the SWMP relate to this issue and are as follows:

Stormwater System Mapping Project

One of the conditions of the permit is to provide an inventory of the City's stormwater facilities. Mapping of the City's Stormwater System is complete. This mapping work included mapping of both pipes and open channels including identification of all known stormwater outfalls.

Illicit Discharge Detection and Elimination (IDDE) program

A formal Illicit Discharge Detection and Elimination (IDDE) program is planned. Areas throughout the City will be targeted for water quality inspections due to their potential impacts to the City's infrastructure and downstream surface waters.

On-site assessments are made using visual methods to detect non-stormwater discharges or illicit connections. Best Management Practices (BMPs) at the facility are reviewed, and all known stormwater discharge points are inspected for odors, discolorations, abnormal flows or abnormal conditions. Observations will be documented, and physical evidence (photos, water quality samples) may be collected when warranted.

When stormwater violations are found, the City of Normandy Park will allow the facility owner to correct the problem within a reasonable time frame. In addition, SWMP provides educational material such as that found in the City's adopted stormwater manuals for the property or business owner to use as a reference for compliance. Civil enforcement action, including issuance of monetary penalties, may be evoked when serious or on-going violations occur.

During the Summer and Fall of 2009 the City, in cooperation with the Washington State Dept. of Ecology, investigated on-going oil pollution discharges into the City's storm system in the area of Normandy Terrace SW. A combination of mapping fuel oil sources and tracing the source led to the identification of a leaking oil tank and its removal and remediation.

Hazardous Materials

The City of Normandy Park will promote responsible hazardous waste management in the City through the Local Hazardous Waste Management Program in King County. The city will explore ways to promote use of the programs offered such as the Voucher Incentive Program (VIP) - a way for local businesses to reduce the amount of contaminants discharged to stormwater. For residents, the program's "wastemobile" will be promoted by including the program on the City web site and newsletter.

4. Construction Site Stormwater

In order to help mitigate the negative impacts associated with changing the natural landscape, The City has implemented several policies which strengthen protection against many of the stormwater issues related to construction sites. These are outlined below:

Improved Inspection

The City now requires regular inspection on all commercial projects and subdivisions.

Pre-construction Meetings

The City requires pre-construction meetings on all projects which pose a potential for significant erosion and sedimentation off site.

Coordination with State Construction Permit

The City now notifies all applicants of grading permits about the Department of Ecology NOI requirements and requires all affected projects to apply.

5. Post Construction Stormwater

Improved Regulation

In 2008 the City passed a new drainage ordinance which included adoption of the 2005 Stormwater Management Manual for western Washington from the Department of Ecology.

Maintenance Inspection Program

The purpose of the maintenance inspection program is to assure the ongoing performance of storm and surface water facilities. The inspection program insures that water flow structures remain operational and that trapped sediment is removed from pipe and catch basins as needed.

Rain Garden Program

The City is exploring the opportunities to encourage voluntary construction of small scale stormwater management systems on private property. One program the City will be pursuing is a partnership with the King Conservation District to utilize the Districts cost-share program for private LID retrofit projects.

6. Pollution Prevention for municipal Operations

Pollution Prevention/Good Housekeeping Operations is one of the Phase II NPDES Permit minimum control measures. As a result, the City of Normandy Park has implemented a Pollution Prevention/Good Housekeeping program for our own municipal operations.

The Phase II permit requires us to examine and subsequently alter our own actions to help ensure a reduction in the amount and type of pollution that: (1) collects on streets, parking lots, open spaces, and storage and vehicle maintenance areas and is discharged into local waterways; and (2) results from actions such as poor maintenance of storm sewer systems. Recognizing the benefits of pollution prevention practices, the City has undertaken the following:

- Implementation of an operation and maintenance program with the ultimate goal of preventing or reducing pollutant runoff from municipal operations into the storm sewer system;
- Development of individual Stormwater Pollution Prevention Plans (SWPPP) for Surface Water Maintenance, Streets, and Parks that include best management practices (BMPs); and
- Providing employee training on how to incorporate pollution prevention/good housekeeping techniques into municipal operations such as park and open space maintenance, fleet and building maintenance, field construction activities and land disturbances, and storm water system maintenance.

Recently the City has begun to implement improvements to the Public Works Operation facility, including regrading and repaving of the yard near the vector decant facility, and installed a new stormwater quality / spill control structure at the bottom of the yard in Spring / Summer 2010.