

Section I—Introduction

Background

The purpose of this study is to define the existing stormwater system, define regulatory gaps, document deficiencies in the stormwater system and outline actions needed in the future for both regulatory compliance and capital improvements. This study also identifies the total cost to implement the Comprehensive Stormwater Management Program.

Incorporated in 1993, the City of Woodinville is a young, growing city faced with the challenges of meeting a host of local, state and federal demands on its resources. In the area of stormwater management, the City is currently providing education, maintaining its drainage system, reviewing new development for compliance with stormwater design standards, controlling pollution sources, monitoring water quality, protecting salmon habitat, constructing Capital Improvement Program projects, and complying with requirements of the federal Clean Water Act for managing its municipal stormwater system discharges. Figure 1-1 shows the vicinity of the City of Woodinville.

To manage its stormwater, the City needs to address local facility needs, reduce flooding, enhance water quality, protect habitat areas and comply with various regulatory requirements. The primary requirements guiding much of this CSWM Plan update include those associated with the Phase II Permit, and the Puget Sound Partnership Action Agenda.

This CSWM Plan is consistent with the 2007 National Pollution Discharge Elimination System Phase II Municipal Stormwater Permit and addresses the other regulatory obligations of the City, while also addressing the City's capital facilities planning needs and other local SWM priorities and initiatives.

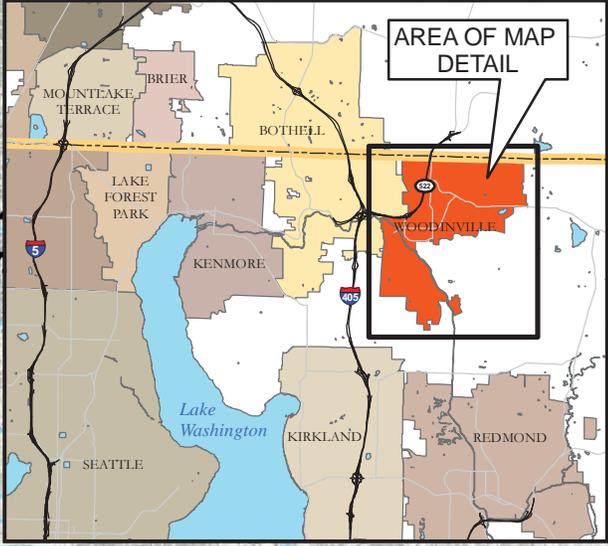
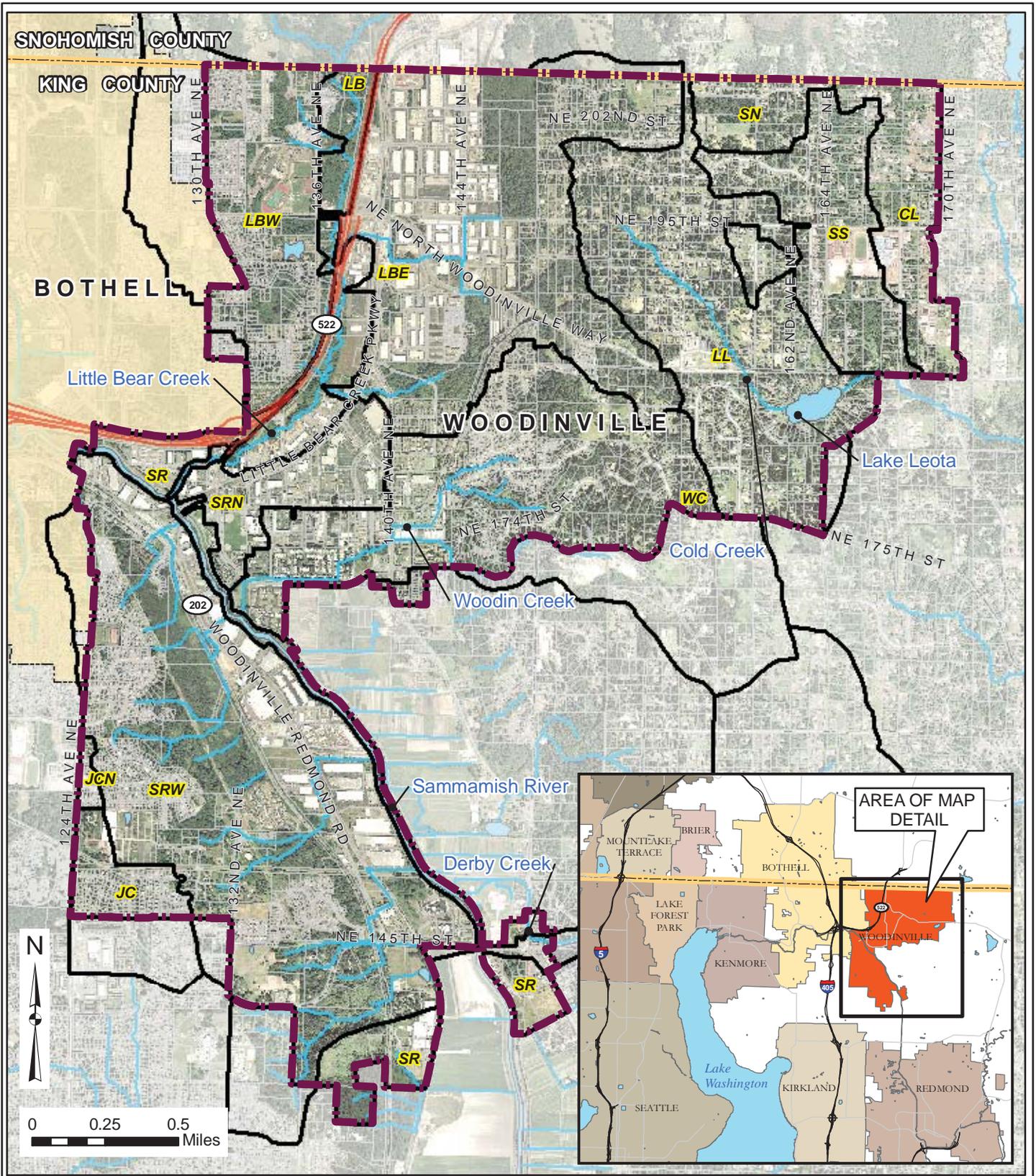
Overview of the Stormwater Management Planning Process

In May 2009, the City embarked on the creation of its first CSWM Plan. The intent of the project is to update the list, priorities, and costs of the City's stormwater capital projects, review and document the status of the City's current Stormwater Management Program, compare it to regulatory requirements, estimate future capital and regulatory compliance requirements and review staffing and revenue levels to ensure adequate resources for implementation.

The City intends to use this study to continue to plan, develop, fund and implement its CSWM Program in order to meet existing and future stormwater-related requirements, reduce localized flooding, and address its other local and regional drainage obligations.



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LEGEND

- City Limits
- County Boundary
- Parcel Boundary
- Subbasin Boundary
- Lake
- Streams
- Highway

Disclaimer: The information shown in this map is assembled GIS data created and acquired by Otak Inc., from the City of Woodinville (city limits hydrology, parcel boundaries, streets), King County GIS (county boundary) and Aerial from Aerials express 2005. This data is not to survey accuracy and is meant for planning purposes only.

STORMWATER MANAGEMENT PLAN

FIGURE 1-1

VICINITY MAP




OCTOBER 2010

The following analysis of the City’s SWM Program was conducted in a series of steps that resulted in achieving the following objectives:

- Documentation of the City’s existing SWM program
- Listing of the City’s various regulatory requirements and SWM obligations
- Reviewing and analyzing the City’s existing SWM Program in comparison to regulatory requirements and activities needed for compliance
- Inventory and mapping of major SWM facilities
- Locating and assessing existing flooding problems
- Identifying capital and maintenance needs
- Forming an updated SWM capital facilities plan
- Developing a CSWM Plan that establishes needed SWM activities and priorities

The flow chart in Figure 1-2 below shows the overall SWM planning process.

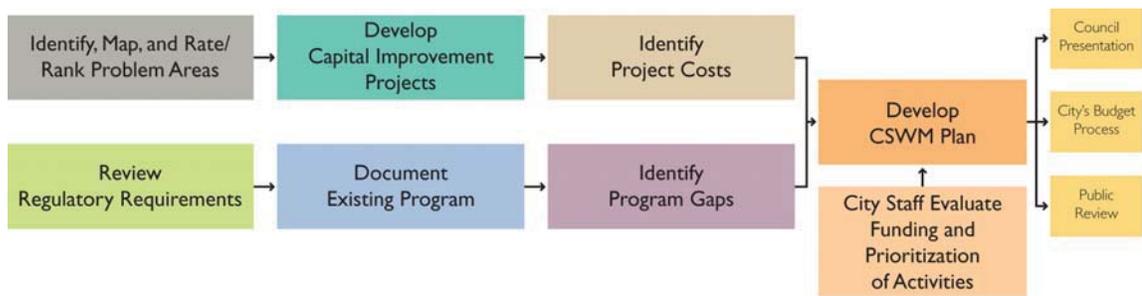


Figure 1-2 – SWM Planning Process

In general, the development of SWM CIP projects and costs occurred concurrently with documentation and review of regulatory requirements and local SWM initiatives, with the results being integrated into the City’s CSWM Plan.

Plan Overview and Organization

This plan begins with an Executive Summary and then presents each phase of the SWM planning process in Sections 1 through 7 as described below.

Section 1—Introduction: Lists study objectives, provides an overview of the CSWM planning process and outlines the format and content of the CSWM Plan.

Section 2—Characterization of the Study Area: A characterization of the City’s natural drainage systems is presented in a series of maps and brief technical summaries that describe the study area in terms of watershed and basin boundaries, hydrologic characteristics, physical features and environmental characteristics.

Section 3—City’s Stormwater Management Plan: Documents the existing City’s SWM Program and CIP Plan, describes its purpose and mission, and summarizes the current SWM Program in terms of activities, services, equipment, staffing, organization and revenue.

Section 4—SWM Facilities and Maintenance: Provides an overview of the City’s SWM Operations and Maintenance Program including staffing and organization, system inventory/mapping, equipment, activities, staff training and recordkeeping. This Section concludes with an assessment of how well the City is meeting the minimum Phase II Permit requirements for maintenance, and provides conclusions and recommendations to ensure future compliance.

Section 5—SWM Capital Needs: Presents CIP Project development methodologies including information sources, stormwater hydrologic and hydraulic modeling results, and rating and ranking criteria. This Section concludes with the presentation of a recommended Capital Improvement Program that includes project descriptions, costs and implementation priorities.

Section 6—Regulatory Compliance: Describes the City’s existing SWM Program in comparison to the Phase II Permit and defines the City’s other drainage-related regulations and obligations. It gives the City credit for its existing SWM Program activities and lists actions needed to achieve regulatory compliance.

Section 7—SWM Program Summary and Implementation: Integrates the results of the CIP development process with the results of the regulatory compliance analyses to form the City’s updated Comprehensive Stormwater Management Plan. SWM activities and projects are listed and prioritized for future funding and implementation.

Data Sources

As part of this SWM planning process, a variety of information has been collected, reviewed and analyzed. Sources of information included interviews with City staff, the City’s 2009/2010 budget (organizational charts, expenditures, revenues and capital facilities), the City’s Water Quality Monitoring Reports, the Washington State Department of Ecology website for Total Maximum Daily Load status, City’s 2002 Environmental Species Act Habitat Assessment, the July 2005 Water Resource Inventory Area #8 Chinook Salmon Conservation Plan, the City’s Phase II Permit and other stormwater-related local, state and federal regulations and obligations, the City’s 2008 and 2009 Phase II Permit Annual Reports to Ecology together with the accompanying stormwater management documents, the Puget Sound Partnership Action Agenda, the City’s stormwater system mapping and inventory, input on potential capital improvement needs (from public survey responses, reported public concerns, maintenance lists and modeling results), the City’s website, 2009 Comprehensive Plan and the Woodinville Municipal Code (WMC).