
CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE: Surface Water & Environmental Services - 2006 Status Update
DEPARTMENT: Public Works
PRESENTED BY: Paul Haines, Public Works Director Jesus Sanchez, Operations Manager Jerry Shuster, Surface Water & Environmental Services Manager

PROBLEM/ISSUE STATEMENT:

The Public Works Operations Division provides to Council a special report highlighting the programs and services performed by the Surface Water & Environmental Services (SWES) division. This report also identifies the SWES projects to be implemented throughout the City in 2006 and 2007.

RECOMMENDATION

No action is required. This staff report is intended to inform the Council on the variety of programs and services provided to the citizens of Shoreline.

Approved By: City Manager  City Attorney _____

INTRODUCTION

This report provides an update of the programs and projects managed by the Surface Water & Environmental Services (SWES) division. It will provide a history of the division, describe core services, highlight major projects recently accomplished, and discuss future programs based on updated Council goals, upcoming regulatory requirements, and technological changes. The focus for this update will be surface water programs and projects that provide flood protection, water quality protection, and habitat restoration. A separate presentation scheduled for September 11, 2006 will highlight the solid waste, recycling, and other environmental and other utility programs (cable & street light) also managed and implemented by the SWES group.

This update will present the following information on SWES group:

- Who Are We?
- What is Our Mission?
- What Are Our Core Services?
- Where Have We Been?
- What Do We Do?
- What Does it Cost?
- How Do Measure Our Performance?
- What Major Projects Have We Recently Accomplished?
- Where are We Going?

BACKGROUND

The mission of the SWES division is:

“To manage, operate, and maintain the City’s surface water infrastructure to promote flood protection, comply with regulatory requirements, and to protect/enhance water quality and habitat through the practice and promotion of sound environmental stewardship”

The core services provided by this group are:

- Flood Protection
- Water Quality Protection
- Habitat Enhancement

Originally called “Surface Water Management”, this City service provider has been in operation since 1995, shortly after incorporation. At that time it consisted of a one FTE who had a background in environmental planning. All services were contracted out 100% primarily with King County through an Inter-local Services contract or with private consulting groups.

In 2001, two more FTEs were added, specialists in environmental education and water quality. In April 2004, Jerry Shuster, a Professional Engineer (P.E.) with a strong

The 2006 operating budget for SWES was \$683,393. SWES is funded entirely from Surface Water Utility fees.

Performance Measures

Annual performance measures include:

- Percentage of Catch Basins Cleaned
- Number of Pump Stations, Dams, and Other Facilities Inspected & Maintained
- Lineal feet of pipe or ditch Inspected & Maintained
- Number of drainage or flooding calls from customers
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DISCUSSION

The following highlights a number of key important projects completed in SWES in 2005-2006:

1. Flood Protection:

- 10th Ave NE/NE 175th St.
- 17th Place NW Culvert Replacement
- Carlyle Hall Drainage Improvement
- Ballinger Creek Sediment Removal
- Pipe maintenance downstream of Ronald Bog
- \$150,000 spent in surface water small works projects

2. Water Quality

- Street Sweeping
- Cleaning of Drainage System
- Echo Lake Inlet cleaning
- Catch Basin Inserts at Hamlin Yard

3. Habitat Restoration

- Ballinger Creek
- Hidden Lake forebay dredging

The following important projects are planned and proposed for 2006-2007:

- From Reactive to Proactive
- Council Goal # 6 – Create an “Environmentally Sustainable Community”
 - Migrate to New Stormwater Design Manual (Low Impact Development)
 - Neighborhood Environment Stewardship Teams (NEST)
 - Use of Raingardens in CIP projects
 - Catch Basin Insert Retrofit for Aurora near Echo Lake

background in surface water systems design and environmental consulting was hired to manage the department. At that time, the name of the department was changed to Surface Water & Environmental Services to promote the environmental aspects of division. Council approved a new position for 2006, the Surface Water Technician to staff the implementation of the various components of the City's first Surface Water Master Plan.

Today, the SWES division is composed of four full-time employee and two part-time interns. The full time employees are as follows:

- Manager
- Environmental Programs Coordinator
- Surface Water Quality Specialist
- Surface Water Technician

- Manage the Operation & Maintenance of the Stormwater Infrastructure

Catch basins = 7,403	Manholes = 635
Drainage pipes = 109 miles	Open water courses = 29 miles
Stormwater Lift Stations = 5	Dams = 5
Stormwater Flow Control/Water Quality Sites Inspected and Maintained: <ul style="list-style-type: none"> ➢ Regional Sites = 30 ➢ Residential Sites = 64 	Commercial Stormwater Flow Control/Water Quality Sites Inspected = 240

- Track the Annual Maintenance of the Stormwater infrastructure
- Design & Implement Repairs to System w/help from Shoreline & King County Road Crews
- Respond to Customers with Drainage, Flooding, or Spill issues

Type	2004	2005	2006 (Jan 1-July 31)
Flooding	186	29	10
Drainage	171	144	105

Reports Spills of oil or other hazardous materials that SWES responds to various from 1 to 5 times per year, on average.

- Monitor Water Quality in Hidden Lake, Echo Lake & All City Streams
- Monitor for West Nile Virus
- Design & Implement Stream Restorations

Budget

- Green Streets – Stormwater planters and curb extensions
- NPDES Phase II
- Regional Watershed Activities
 - Working with nearby jurisdictions on flooding, water quality & habitat issues
- Active Participation in City Wide Development Projects
- CIPs in SWMP – 2007-20012 CIP has \$17.4 M in projects
 - Thornton Creek Corridor
 - East Boeing Creek Basin Drainage Project (include Darnell Park)
 - Pump Station 25 upgrade
 - \$160,000 in surface water small works projects
 - Others

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