



Kitsap County Surface and Stormwater Management Program

2010 Annual Report



The Kitsap County Surface and Stormwater Management Program (SSWM) protects people, property and natural resources by addressing water quality and quantity. Five agencies carry out SSWM program activities: Kitsap County Department of Public Works, Kitsap County Department of Community Development, Kitsap County Health District, Kitsap Conservation District, and Washington State University Kitsap County Extension.

In 2010, SSWM increasingly implemented the “Water as a Resource Policy” to reduce stormwater runoff and ensure that the remaining runoff is clean. Some key efforts included:

- **“Green” stormwater infrastructure** such as rain gardens, pervious pavement and bioswales were installed, and water quality staff are evaluating their effectiveness. More of these low impact development techniques – which soak up and clean polluted runoff -- will be used throughout the county in the coming years.
- **Measuring the health of Kitsap watersheds.** To assess the health of our watersheds, water quality monitoring staff increased efforts to monitor three important indicators: bacteria pollution, stream bugs, and stream flows.
- **Water quality street-sweeping program.** In partnering with the Roads Division, SSWM began using new high-efficiency street sweepers to prevent pollution from entering Puget Sound.
- **New education and outreach partnership.** WSU Extension joined the SSWM education and outreach team, and will conduct the Beach Watchers and Stream Stewards programs.

A more detailed 2010 Annual Report can be found on SSWM's web site at www.kitsapgov.com/sswm.

Improving the Storm System

Continuous improvements to the County's stormwater facilities reduce the frequency and severity of flooding, improve water quality, increase fish passage, and provide habitat.

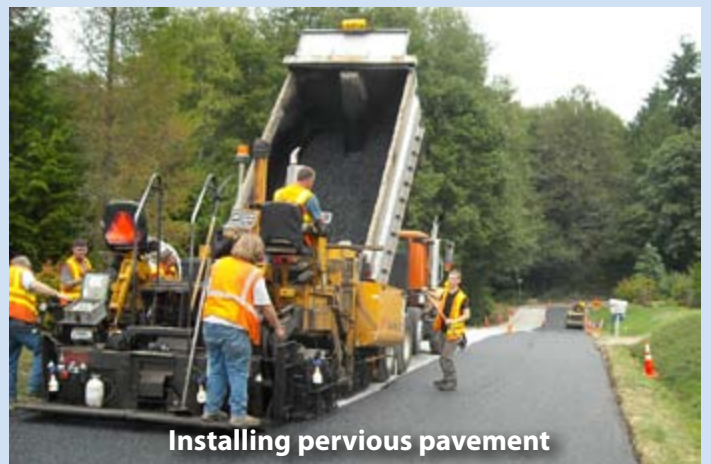
Project Highlights

Converse Regional Storm Pond - To reduce flooding and meeting the Converse Basin's future drainage needs, SSWM built a regional stormwater detention pond and approximately 3,000 feet of stormwater pipe in South Kitsap.

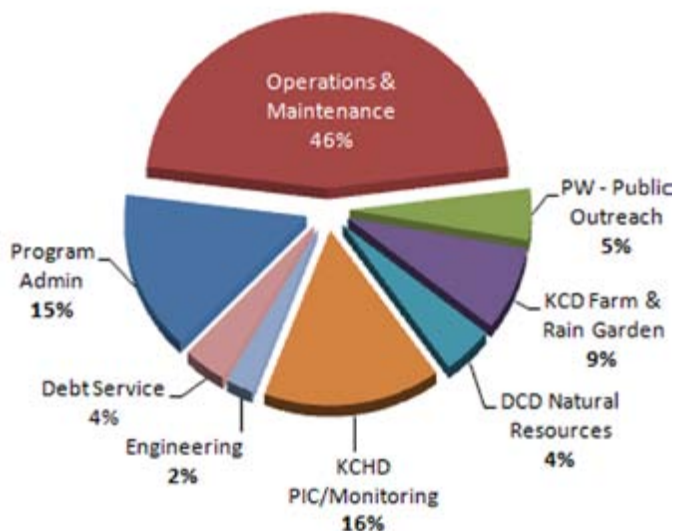
Stavis Creek Culvert Replacement - SSWM replaced a culvert carrying the West Fork of Stavis Creek under Seabeck Holly Road NW in West Kitsap. This opened up the creek to fish passage.

Pervious Pavement Pilot Projects - County Roads crews installed pervious pavement in three county neighborhoods: NW Canyon Street in North Kitsap, Bridle View Place in Central Kitsap, and SE Holly Court in South Kitsap.

New natural stormwater system at Village Greens Golf Course - SSWM and the Parks Department built a 600-foot natural stormwater treatment system that will reduce regional flooding and improve water quality.



2010 SSWM Expenditures



The SSWM program is funded through a fee assessed to each developed property and road located within unincorporated Kitsap County. In 2010, the fee was \$69.80 per year for a single-family residence.

Preventing Pollution from Entering Our Waterways



Cleaning the stormwater system

Kitsap County cleans County stormwater facilities and roads to keep pollution out of our waterways. In 2010, SSWM's maintenance activities removed over 1,200 tons of potentially harmful solid material from catch basins, vaults, stormwater ponds, and roads. The following pollutants were removed from the storm system:

- 800 pounds of toxic metals (copper, lead and zinc)
- 9 pounds of PAHs (polyaromatic hydrocarbons)
- 290 gallons of oil

Strong Partnership Cleans Dyes and Sinclair Inlets



Cleaner water in Dyes Inlet

Water quality has improved dramatically in Dyes Inlet thanks to the efforts of SSWM and area residents. Sources of fecal pollution, such as failed septic systems, waste from farm animals, combined stormwater-sewer overflows, and contaminated runoff were found. Property owners and partner agencies fixed these pollution problems, resulting in cleaner water in Dyes Inlet. After years of shellfish closure, some areas in Dyes Inlet are now clean enough to harvest shellfish. As water quality continues to improve, more shellfish area is opened up for harvesting.

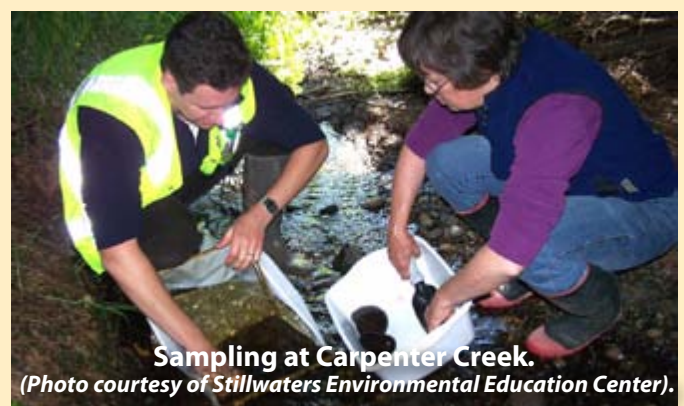
Rain Garden Cost-Share Program



Rain garden in South Kitsap

Kitsap Conservation District began implementing the residential rain garden program. Residents in unincorporated Kitsap County can receive technical assistance and up to \$500 to construct a rain garden. In the first nine months of the program, over 70 homeowners applied for the rain garden cost share.

Benthic Monitoring for Stream Health



Sampling at Carpenter Creek.

(Photo courtesy of Stillwaters Environmental Education Center).

Water quality specialists are analyzing stream bugs to assess the health of Kitsap watersheds. The more types of bugs found in the stream, the healthier the stream. In 2010, SSWM began an enhanced monitoring program and will monitor 31 streams. Stream samples will be collected once every two years at most locations.

Engaging Kitsap Citizens



*Using Mutt Mitt
(Photo: Jesse Beals)*

SSWM informs Kitsap citizens that stormwater receives little or no treatment before it flows into our streams and Puget Sound. This program encourages people to make small changes in their everyday activities to improve the overall health of Puget Sound. Partner agencies work with residents, commercial properties, farms, septic systems, and volunteers.

2010 highlights include:

- Distributed over 110,000 stormwater awareness messages, including publicizing the water pollution hotline
- Over 3,900 Kitsap youth and adults participated in presentations, events, surveys and workshops.
- Kitsap citizens improved water quality by building 70 rain gardens, sponsoring 50 new pet waste stations, and volunteering in numerous stewardship programs.

How You Can Get Involved!

Learn more and help improve water quality:

- Install a rain garden or rain barrel
- Plant native plants and trees
- Reduce paved areas or use pervious pavement
- Improve soil with compost
- Sponsor a pet waste station
- Volunteer in stewardship programs
- Attend a SSWM Advisory Committee meeting

Puget Sound
Starts Here

For More Information

The mission of the SSWM Program is to promote and protect public health, safety and welfare by establishing a comprehensive, sustainable approach to surface and stormwater management.

Stormwater Infrastructure, Stormwater System Inspections and Maintenance, Water Quality Monitoring, Education
Kitsap County Public Works
www.kitsapgov.com/sswm
360-337-5777

Septic System Information, Stream and Swimming Advisories, Shellfish Closures, Testing Well Water, Water Quality Monitoring Report

Kitsap County Health District
www.kitsapcountyhealth.com
360-337-5235

Farm Management,
Rain Gardens, Backyard Habitat Grants

Kitsap Conservation District
www.kitsapcd.org
360-337-7171

Volunteer Opportunities: Beach Watchers, Stream Stewards, Rain Garden Mentors

Washington State University Kitsap County Extension
www.kitsap.wsu.edu
360-337-7157

Watershed Planning
Kitsap County Community Development
www.kitsapgov.com/dcd/
360-337-5777

