

Stormwater Studies

Stormwater Management is committed to investigating ways to improve stormwater quality prior to discharging the water into our streams and waterways. The City is conducting several stormwater studies that investigate the effectiveness of stormwater treatment devices and Low Impact Development (LID) technologies. The City feels that these studies are an important step in understanding each technology's ability to remove pollutants and in understanding the maintenance requirements of these devices.

WSDOT Lake Union Ship Canal Research Facility

The City, in collaboration with Seattle Public Utilities (SPU) and the Washington State Department of Transportation (WSDOT), tested media filtration systems at the WSDOT Ultra-Urban Stormwater Research Facility. The research facility is located in Seattle, Washington, in the Interstate 5 right-of-way beneath the north side of the Lake Union Ship Canal Bridge.

The facility is being used to test the ability of selected media filtration systems to remove stormwater pollutants, especially metals, PAHs and phthalates. A grant received by the City from the Federal Highway Administration has been used to fund the majority of the study costs.

The CONTECH® Stormwater Solutions StormFilter was sampled at the facility between October 2003 and October 2005. Results of the sampling program are presented in the [StormFilter final report](#).

The AquaShield™ Aqua-Filter was sampled at the facility between March 2007 and October 2008. Results of the sampling program are presented in the [AquaShield final report](#).

Tacoma Landfill Pervious Pavement Demonstration Project

The Stormwater and Solid Waste utilities created a demonstration project at the Tacoma Landfill to study various types of pervious pavements and how each affect flow control, water quality, maintenance and durability. The 36,100-square-foot paved area, which is used to provide employee parking, was constructed with equal sections of pervious interlocking pavers, pervious concrete, pervious asphalt and standard asphalt. Construction of the project was completed in April 2006.

Review the [study on the water quality](#) of the pervious pavements compared to standard asphalt pavement. Review the [study on the flow performance](#) which was also conducted.