Green Sweep Program

The Department of Public Works (DPW) Road Maintenance and Stormwater Divisions have coordinated in developing a street-sweeping program called Green Sweep, focused on pollutant removal and water-quality enhancement. The Program is the first line of defense in protecting Kitsap streams, wetlands, lakes and Puget Sound.

Removing Pollutant Loads
Under the National Pollution Discharge Elimination System (NPDES) permit that governs municipal pollution prevention, jurisdictions are required to reduce pollutant loading from streets using an array of best management practices. Utilizing high-efficiency (HE) street sweepers to remove pollutants from roads surfaces is one method to reduce pollution near its source and meet NPDES permit requirements. Kitsap County DPW utilizes three high efficiency sweepers which have brooms like traditional sweepers for collecting larger debris, but also use high-pressure air to loosen very fine sediment from pavement surfaces and vacuum-assisted filter systems to collect this fine material and attached pollutants.

The Green Sweep program uses a sweeping route and frequency that is based on factors related to pollutant loading potential: traffic levels and type of traffic, surrounding land use activity, and proximity to receiving waters.

Measuring the Effectiveness of Programs
An integral part of the Green Sweep program is measuring its effectiveness. Kitsap County DPW tracks the tons of material removed, lane miles swept, and samples for pollutants including metals, oils, and hydrocarbons.

In 2012 the Green Sweep program generated 509 tons of solids which included approximately 33 pounds of copper and 111 gallons of oil. With this data, and similar data for material removed from catch basins and ponds, we are able to quantify the road-generated pollution removed from County roadways and relate the program to a water quality benefit.