



## FDM 10-40-1 Introduction

January 24, 1997

The following BMPs are effective water quality management measures but must be coordinated with WisDOT Maintenance staff, and/or local units of government. They are ineffective if they are not maintained or performed on a regular basis, therefore a schedule for this work must be considered by the designer. Consideration must also be made, by WisDOT Maintenance, to budget sufficient funds for this work when it cannot be incorporated into the project agreement with the local unit of government.

## FDM 10-40-5 Street Sweeping

October 22, 2012

### 5.1 Description and Purpose

Street sweeping involves the removal of grit, debris, and trash from urban impervious areas such as streets, parking lots, and sidewalks. If these materials are removed from the streets where they are deposited, they are no longer available for loss in urban runoff.

### 5.2 Target Pollutants

Street sweeping is most effective form removal of coarse particles, leaves, trash, and other similar materials. In some cases, there could be a relatively high delivery ratio for these materials if they were not removed from street surfaces. The specific pollutants generally reduced by street sweeping include sediment, nutrients, and oxygen demanding substances.

### 5.3 Planning Considerations

A semi-annual street sweeping program is recommended to remove debris after spring snowmelt and after leaves fall in the autumn.

Two common types of street sweepers are used. They are vacuum sweepers and mechanical broom sweepers. Vacuum sweepers are more effective for removing fine particles than broom sweepers. Removing fine particles is important because many pollutants are adsorbed to them. Vacuum sweepers have the disadvantage of being ineffective at cleaning wet street surfaces.

Broom sweepers are effective at picking up large particulate matter and are effective on wet street surfaces. Broom sweepers also cost less to operate than vacuum sweepers. Broom sweepers generally create airborne dust during their operation which increases atmospheric loadings to a certain extent.