

6- Facility Plan Stormwater Management Policy

The Facility Plan includes direct and indirect stormwater quality and quantity impacts. The Village of Shorewood recognized that the protection of personal private property against basement backups should not be realized at the expense of water quality degradation risk in Milwaukee River of Lake Michigan.

Accordingly, the following water quality principles are incorporated into the projects outlined herein:

- The construction of new sanitary sewers should not have adverse surface water quality impacts, unless emergency conditions that cause widespread flooding occur in the region.
- The construction of temporary flood control points should not have adverse surface water quality impacts, unless emergency conditions that cause widespread flooding occur in the region.
- The construction of new storm sewers should follow the existing drainage alignments to the greatest extent possible and avoid creating new discharge points to receiving waters. Storm sewers in the separated area proposed in this plan follow this directive and do not create new discharges into Milwaukee River.
- The only new discharge to Milwaukee River is proposed for the combined sewer service area, and the proposal contains the provision to divert the first flush into the MIS and outflow into Milwaukee River in conditions exceeding a predetermined amount of rain.
- All storm sewer construction to be accompanied by an evaluation of sustainable (i.e., runoff reducing) practices that may be applicable at that location.

Designers working on behalf of the Village of Shorewood have been tasked with the evaluation of sustainable stormwater handling practices that minimize discharges and handle runoff closer to where it falls. To this end, the Village is using EPA Great Lakes Restoration Initiative funds to develop a design guidance and evaluation document that will be uniformly and universally applied to infrastructure construction.

The proposed project will include the evaluation and design of innovative and effective urban BMPs that can be used throughout the Village. Some examples include pervious gutters and terrace biofilters. The proposed BMPs address many of the issues related to pervious pavements in Midwestern climates by moving them to the gutters, where they are protected from road traffic. In addition, Shorewood's current street sweeping program is well suited to provide on-going cleaning to pervious gutters, especially ones that are in specific locations. The potential for widespread use of this BMP in Shorewood is high.

The terrace biofilters have been used elsewhere in Wisconsin, notably in Madison. When located judiciously, these can provide a measurable benefit in runoff quality. The Village has most recently built 13 terrace biofilters on State Highway 190 Capitol Drive, a project funded by Wisconsin Department of Transportation.