

# SABIE RAIN GARDEN FRIDLEY, MN



## Project Summary

A curb-cut rain garden was installed on a residential property within the City of Fridley during the summer of 2011. The garden will collect stormwater runoff that would have otherwise drained directly to East Moore Lake. The property is located near a busy intersection, and therefore provides a high-visibility example of a modern and cost-effective water quality improvement practice. The curb-cut rain garden will reduce stormwater volume and pollutant loads that reach East Moore Lake.

Project funding was provided by the Rice Creek Watershed District (RCWD) cost-share program and landowner contribution. Long term maintenance will be conducted by the landowner.



## Project Specifications

Rain Gardens Installed .....	1
Date Installed .....	June 2011
Total Planting Area.....	620 ft <sup>2</sup>
Total Capacity .....	385 ft <sup>3</sup>
Watershed Treated.....	3.37 acres

## Project Funding

RCWD Cost Share .....	\$1,664.17
Landowner Contribution....	\$1,664.17
Total Project Cost.....	\$3,328.34

## Before and After



The curb-cut rain garden was installed to treat stormwater from the participating property, neighboring properties, and the street. Prior to installation, rain falling on impervious surfaces within the rain garden drainage areas was channeled, untreated, via the curb and gutter system directly to East Moore Lake. This excess runoff can cause:

- An influx of sediments, nutrients, and pollutants,
- Algae blooms and unwanted aquatic vegetation, and
- An increase in water temperatures that can harm fish and other wildlife.

## Installation

The curb-cut rain garden was installed during the summer of 2011. The figure to the right highlights the location of the rain garden and the corresponding drainage area.



Site preparation included a curb-cut and soil excavation to accept runoff from the existing curb and gutter system.

Retaining wall construction, as well as soil amendment with rain garden soils, to promote treatment and infiltration.



Installation of the pretreatment chamber to prevent excess sediments from clogging the rain garden and smothering the plant community.

Completed inlet and pretreatment chamber collect stormwater runoff from the drainage area outlined in the map above.



Curb-cut rain garden location and corresponding drainage area.



Fully functioning curb-cut rain garden. The rain garden is designed to fill with approximately 12 inches of water prior to bypass. Complete infiltration of the water within 24-48 hours following the storm event ensures the rain garden does not become a permanent water feature.