



# Maplewood Mall Stormwater Infiltration Retrofit



## Clean Water Funds: 2010

Clean Water Grant	\$500,000
Leveraged Funds*	\$700,000
Total Project Budget	\$1,200,000

\* Leveraged Funds include required 25% local match

**Targeted Water:**  
Kohlman Lake

**Project Sponsor:**  
Ramsey-Washington Metro Watershed District

**Partners:**  
Maplewood Mall, Ramsey County, City of Maplewood

**Grant Period:**  
January 2010 - December 2011

**Project Contact:**  
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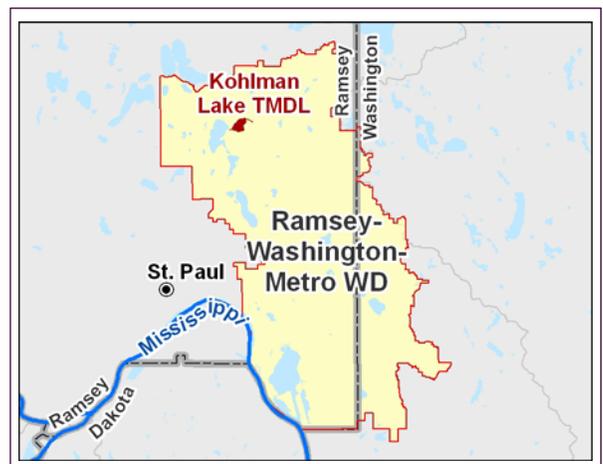
## Project Narrative

The Kohlman Lake TMDL calls for the reduction of nutrients from watershed and in-lake loading. A major source of phosphorus loading is from the impervious areas in the District (roads, interstates, roofs, and parking lots). In the analysis of the Kohlman Lake watershed, one major land use feature stands out - Maplewood Mall. The District identified that retrofitting the Mall parking areas to infiltrate at least one inch of runoff would result in a large reduction in phosphorus to Kohlman Creek and the lake.

The District began discussions with the Mall in 2008 and implemented a Phase I project of rainwater gardens at each of the Mall entrances. This project was completed with District funds in 2010. Phase II of the project was submitted to the CWF and awarded in 2010. The project has been in the planning and design phase with construction slated for summer 2011. The project goal is to infiltrate or filter the runoff from the northeast quadrant of the mall parking lot by using primarily tree trenches. Other practices will include rain garden and planter areas, porous pavement, and a cistern. The project will also include an educational and interpretive element which will include public art, signage, and exhibits.

The project is estimated to reduce phosphorus loading from 33 to 13 pounds per year and reduce sediment loads from 3.2 to 0.3 tons per year.

The District is making plans to cooperatively address the remainder of the Mall lots within the next 3 years. The District has received a federal grant for the northwest quadrant of the mall parking lot. This construction will also take place in 2011.



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Maplewood Mall Entrance Raingardens (in yellow)



Cliff Aichinger (RWMWD Administrator), Justin Blattner (Nadeau Excavating), Laurie Van Dalen (Simon Property Group) and a Midwest Electric Representative, at the Woodlyn Garden during Construction



Southlawn Garden During Construction