

# Lone Lake

**Issue:** 54% of the phosphorus load to Lone Lake was from direct watershed runoff.

**Goals:** Improve storm water runoff quality

**Project Description:** Lone Lake is classified as a Level I lake that fully supports water recreational activities. The June 2000 Use Attainability Analysis of Lone Lake indicated that 54% of the annual phosphorus load to Lone Lake was from direct watershed runoff. The District, in partnership with the City of Minnetonka, implemented the Lone Lake storm water infiltration project to protect the lake from further degradation and to improve and reduce storm water runoff.



The project was implemented in Lone Lake Park owned by the City of Minnetonka in the Fall of 2005 and Spring of 2006. To meet the project objectives, three rain gardens were constructed on the south side of an existing parking lot. The existing parking lot was redesigned to include a large infiltration basin in the center of the parking lot. Runoff from the 0.7 acre parking lot is collected in this infiltration basin, which was designed to collect and infiltrate the first one inch of runoff from the lot.

**4 Years later:** After 4 years, the combination of rain gardens and basin has resulted in a significant reduction in watershed runoff and phosphorus reaching Lone Lake.



## Quick Facts

**Lake Area (acres):** 17.3

**Littoral area (acres):** 4

**Maximum Depth (ft):** 27

**Water Clarity (ft):** 6.6

**Lake Classification:** Whole-body contact recreational (swimming)

**Trophic Status:** Mesotrophic (nourished)