Upper Watershed Volume Reduction

Clean Water Funds: 2011

Clean Water Grant	$101,582
Leveraged Funds*	$227,062
Total Project Budget	**$328,644**

*** Leveraged Funds include required 25% local match**

Targeted Water:
County/Watershed Wide

Project Sponsor:
Prior Lake-Spring Lake Watershed District

Partners:
Scott County SWCD

Grant Period:
January 2011 - December 2014

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Project Narrative

The management of water quality and water levels in the Spring and Prior chain of lakes has been a top priority for the Prior Lake-Spring Lake Watershed District (PLSLWD) and local partners. Fluctuating water levels affect recreational use and shoreline stability. Both lakes have poor water quality conditions and are impaired due to excessive nutrients. In 2004, the PLSLWD conducted a study that identified areas draining to Spring Lake that have potential for stormwater storage and infiltration. A recent project narrowed down which opportunities would provide the most cost effective benefits to the downstream lakes.

The reconstruction of County Road 12 and Sunset Avenue in the city of Prior Lake afforded the District with an opportunity to improve and increase a wetland with marginal resource benefit which included an agricultural drainage ditch. The project enhances flood control and captures phosphorus and sediment before they reach Spring Lake and other downstream water bodies. It treats runoff from two highways , city roads as well as an upstream 60 acre agricultural area.

Actual Outcomes

Three wetland and treatment basins and an iron sand filter system were installed in addition to a small trail system. The project stores approximately 62 ac-ft of stormwater per year. In 2014, extensive rains in the Spring caused regional flooding and the wetlands provided much-need stormwater storage. In addition, the settling of particulates in the wetland as well as removal of phosphorus from the iron sand filters results in approximately 60 lb/year of TP reduction. The three Agri Drain Outlet structures are retrofitted with vertical bar grates to limit the access of common carp into the project area.