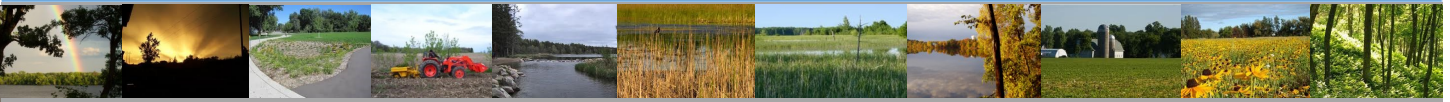


Little Elk Lake Stormwater / Sediment Control Baldwin Township

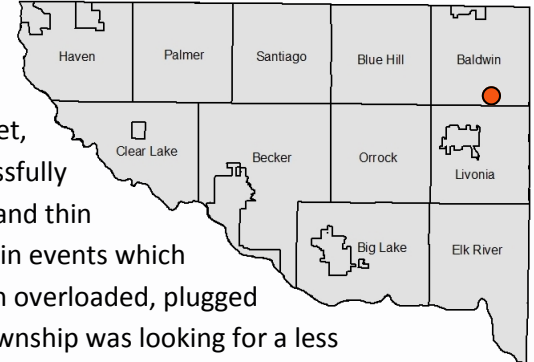
Stormwater /Sediment Control Project



Project Summary

The Sherburne SWCD received a request for assistance from Baldwin township to address an erosion and sedimentation problem on 142nd street, a residential gravel road on Little Elk Lake, after the township had unsuccessfully attempted to reduce sediment entering the lake by installing a rock chute and thin vegetative buffer. The attempt was continually challenged during heavy rain events which would carry sediment from the 300 liner foot stretch of road resulting in an overloaded, plugged rock chute and the formation of a small sediment delta in the lake. The township was looking for a less laborious and more effective sediment reduction practice.

In 2013, with assistance from the SWCD, the township, their engineer and local residents decided to re-surface the gravel road and install a sediment trap (SAFL baffle) above to the rock chute. The SAFL baffle, developed by the University of MN, was placed in a 48" sump manhole and reduces stormwater velocity so sediment from the road settles out prior to entering the rock chute, buffer and ultimately the lake. Sediment will be removed from the manhole with a vacuum pump as needed. This project was cost shared with 2011 Clean Water Funds through the Elk River Watershed Association.



Before - Rock chute plugged with sediment



After - Manhole fitted with SAFL baffle

Project Details

Project Funding

Project Partners

Date Completed11/2013

Phosphorous Reduction 10 lbs./yr.

Sediment Reduction29 T/yr.

2011 Clean Water Fund\$12,691.33

Baldwin Township.....\$23,068.67

Total Project Cost\$35,760.00

Elk River Watershed Association

Sherburne SWCD

Baldwin Township

MCD - NPEAP



Sediment laden buffer strip



Completed project showing inlet manhole and sump manhole



Fill was excavated behind poles & re-shaped to stable slope



Sump manhole with SAFL baffle installed



Sump manhole outlet to rock chute



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The Sherburne County Soil & Water Conservation District is dedicated to working directly with landowners and agencies in order to promote the wise and sustainable use of our land and water related resources to educate and inform the public about these uses; to help solve the resource problems within the District and to serve as a county wide natural resource information and referral center.