The Carnelian-Marine-St. Croix Watershed District (“District”) continued to promote and implement its Cost-Share Program in 2013. The following report summarizes cost-share program activities and provides a brief summary of three capital improvement projects that were completed in 2013.

2013 SUMMARY

In 2013, Administrator Jim Shaver and Natural Resource Specialist Jed Chesnut completed 21 on-site visits with property owners living within the boundary of the District. On-site visits were conducted when requested by a landowner. On-site visits typically consisted of walking the property with the landowner and evaluating the property for water quality related issues. If a water quality issue was identified, the landowner was presented with information on the District’s Cost-Share Program and provided with a Cost-Share Application. If the landowner choose to complete the application, the Washington Conservation District prepared a cost-estimate and concept plan to be reviewed by the District Board of Managers (“Board”) for funding consideration.

The Board reviewed eight Cost-Share Applications. Four applications were recommended for funding. A total of $4,698.70 was allocated in 2013 for approved cost-share projects. Figure 1 (attached) shows the locations of the cost-share projects in the District.

FUNDING APPROACH

2013 focused on residential/individual cost-share projects. Typically, the board provides 50% cost-share not to exceed $2,500.00 for qualifying water quality improvement projects. No applications for community cost-share projects were received in 2013. One joint project with the City of Scandia was completed on the west side of Big Marine Lake. The City implemented improvements to the road ditch and the District provided cost-share funding to the landowner along the road.

BMP SUBCOMMITTEE

Due to the small number of applications in 2013, the subcommittee did not meet. The applications were brought directly to the Board for its review.

2013 COST SHARE PROJECT INFORMATION

Project sheets for each individual cost-share project constructed in 2013 were developed for inclusion in this report and for publishing on the District’s website. The project sheet contains a description of the project, photos, the project design, project costs, and pollutant reductions. The project sheets are attached at the end of the report. Summary tables of projects that were completed in 2013 and projects that were approved by the Board in 2013 (but not yet constructed) are below.
OTHER PROJECTS – 2013

CMSCWD TMDL and Focused Lake Native Buffer Project

In 2012, the District applied for and received funding from the Minnesota DNR’s Conservation Partners Legacy Grant Program to complete buffer restoration projects on priority lakes within the District. The projects will work to promote the enhancement of plant diversity and improvements of the overall habitat found in the transition zone between lake surface water and the upland habitats.

During the summer of 2013, the District’s contractor began work on three native buffer installations, each on a different lake: Sand Lake, Goose Lake, and Hay Lake. The initial site preparation was completed and the seeding took place prior to the end of the season in 2013. Follow up maintenance is expected in 2014 for these sites.

A City-owned property on Goose Lake was added to the project list during the winter. The installation of the native buffer will commence in the spring. Additional projects are being sought to utilize the remaining grant funding. It is anticipated that the grant, in its entirety, will be used for implementing native buffers, primarily on impaired lakes in the District.

Educational Programs

Several educational outreach programs took place in 2013 in or near the District. There was an aquatic invasive species workshop as well as a raingarden workshop. Each of these was very well attended and generated several site visits. The workshops educated area residents on native plants, lakeshore plantings, invasive species, and raingardens. Additionally, there were additional meetings focused on specific waterbodies or developments. A meeting was held with residents around Goose Lake to discuss the District’s TMDL implementation plan for the lake to reduce pollutant loads. The other meeting focused on best management practice implementation and was with homeowners of the Tii Gavo development in Scandia. The East Metro Water Resource Education Program also represented the District at Taco Daze in Scandia and published several articles relating to water quality in local newspapers.
2014 COST-SHARE PROGRAM

The District will continue to move forward with its cost-share program in 2014. The District and the WCD will work collaboratively to increase the local residents’ cost-share opportunity awareness through targeted educational programs. The overall goal will be increase the number of projects implemented in 2013 within priority areas. The District has allocated $40,000.00 to put towards project cost-share and technical assistance.
2013 Project Profile

Project #1 - Scandia

Project Type: Native Buffer Planting

Project Description: This project consisted of a conversion of turf to native prairie. The goal was to not only provide wildlife habitat, but also to improve downstream water quality by eliminating the use of fertilizers and thereby reducing the pollutant load to the St. Croix River.

Pollution Reduction

Phosphorus (TP): 0.13 lbs/yr
Nitrogen (TN): 0.17 lbs/yr
Suspended Solids (TSS): 5.49 lbs/yr

Project Details

Closest Water Body: Falls Creek
Date Constructed: June 2013
Size of Project: 8,000 sq ft
Cost Share Amount Funded: $612.50
Total Cost: $4,305.00

Projects completed with design assistance by the Washington Conservation District funded by the CMSCWD. Visit www.cmscwd.org for more information
**2013 Project Profile**

*Project #2 - Scandia*

**Project Type:** Native Buffer Planting  
**Project Description:** This project consisted of rerouting stormwater discharge and installation of a drainage/infiltration swale. The project removed an aging stormwater discharge structure that was causing severe erosion on a steep hill where it outlets. The stormwater discharge caused sedimentation which ultimately drained to Big Marine Lake. Stormwater was rerouted away from the steep hill into the roadside ditch. A drainage swale was also installed to provide water quality treatment via infiltration and the homeowner’s rain gutters were rerouted into the swale to further reduce erosion on the hill side of the house. The eroded gully, caused by the stormwater discharge, was also repaired. The City of Scandia was a partner on the project and contributed by reconstructing the roadside ditch.

**Site Design**

**Pollution Reduction**

Combined Loads of Gully Stabilization and Swale  
Phosphorus (TP): 1.33 lbs/yr  
Nitrogen (TN): 1.10 lbs/yr  
Suspended Solids (TSS): 2,036 lbs/yr

*Projects completed with design assistance by the Washington Conservation District funded by the CMSCWD. Visit www.cmscwd.org for more information*
**2013 Project Profile**

*Project #3 - May Township*

**Project Type:** Native Buffer Planting  
**Project Description:** A small area of the property between the house and garage received a large amount of runoff from the steep hill on the western side of the house. The area was also a collection point for stormwater discharge from the garage roof. This runoff would then leave the property via the driveway and discharge down to the highway carrying pollutants and sediment that eventually flowed to Arcola Creek and the St. Croix River. The project goal was to slow down the velocity of the runoff as well as improve water quality through infiltration. This goal was met by installing a 435 square foot raingarden.

**Before Installation**

**Site Design**

**Pollution Reduction**

Phosphorus (TP): 0.74 lbs/yr  
Nitrogen (TN): 1.05 lbs/yr  
Suspended Solids (TSS): 34.33 lbs/yr

**Project Details**

- **Closest Water Body:** Arcola Creek  
- **Date Constructed:** June 2013  
- **Size of Project:** 435 sq ft  
- **Cost Share Amount Funded:** $598.75  
- **Total Cost:** $1,298.64

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