



Sub-Watershed Targeting in The Cottonwood River



Clean Water Funds: 2012

Clean Water Grant	\$363,957
Leveraged Funds*	\$134,003
Total Project Budget	\$497,960

* Leveraged Funds include required 25% local match

Targeted Water:

Minor Watershed 29053
Amended to add:
Minor Watershed 29043 and
Minor Watershed 29048

Project Sponsor:

Soil and Water Conservation
Districts within RCRC

Partners:

Natural Resources Conservation
Service

Grant Period:

January 2012-June 2016
With extension and Amendment

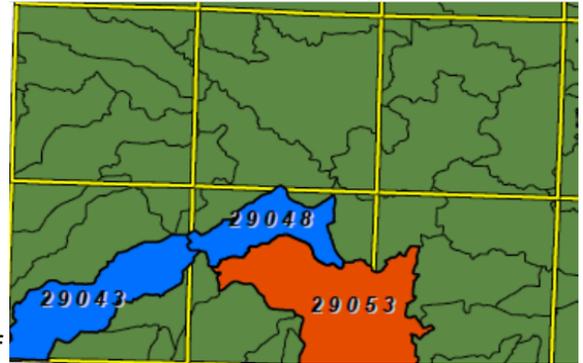
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Project Narrative

Minor watershed 29053 is one of the many little Tributaries to the Cottonwood River, one of the thirteen major watersheds in the Minnesota River Basin and the largest watershed in Redwood County. The dominant land use in all of



these minor watersheds and the Cottonwood River Watershed is agricultural, chiefly row-crops with some livestock production. The vast majority of the wetlands have been drained through a highly intricate and efficient system of tiling and ditches. The minor watersheds that lie south of the Cottonwood River have a topographic that is very different from the remaining parts of the county; have steep slopes, intense grade and deeper confined ravines. Concentrating conservation efforts in these small sub-watersheds allows us to intensify the water quality, water recreation and wildlife habitat benefits local and positively impacting the Cottonwood River downstream of the targeted area. Due to unforeseen circumstances with several landowners in the initial minor watershed, 29053, we requested and received approval to add two additional adjoining minor watersheds (29043 and 29048) and an extension to June 30, 2016. These two minor watersheds have the same topography and some of the same landowners who wished to extend their work into these areas.

Results:

TSS – Sediment Reduction.....1,358.02 tons per year
Soil Saved.....1,135.55 tons per year
Phosphorus reduction.....1,340.01 pounds per year

Based on Feedlot assessments, there were improvements made to three feedlots in the sub-watersheds. Grid Sampling and variable rate applications now assures correct placement and reductions in nutrient applications on 1,798.4 acres in the watersheds.

Proposed Outcomes:

Water and Sediment control basins.....	4
Grassed Waterways.....	2 Systems
Grade Stabilizations Structures.....	3 new and 2 Repairs
Grid Sampling with Variable Rate Nutrient Applications.....	1,200 acres
Feedlot Assessments for Containments.....	5

Actual Outcomes:

Water and Sediment Control Basins.....	10
Grassed Waterways.....	4,700 Feet
Grade Stabilization Structures.....	9

Paid an incentive to Comprehensive Nutrient Management Assessments completed on three feedlot operations in the initial watershed.

It was recommended that two of the feedlots establish grass buffers to address runoff. Both established their buffers to achieve compliance. The third feedlot, there were steep slopes present and gullying was evident. The landowner made the decision to relocate the feedlot.

Provided an incentive payment to seven landowners to try Grid Sampling and Variable Rate Application on 1,798.4 acres. All landowners have continued with this type of nutrient applications as they found their yields increased or stayed the same with correct placement and in some cases reduced amount of nutrients applied.