



# FY2013 Clean Water Funds Redwood and Cottonwood Rivers Targeted Drainage Water Management Project



## C13-1980 Clean Water Assistance

### Administrative, Project Development, and Technical/Engineering Assistance

	Grant Budget	Spent
Administrative	\$5,000.00	\$5,000.00
Project Development	\$5,000.00	\$5,000.00
Technical	\$10,000.00	\$10,000.00
Cash Match	\$7,000.00	\$7,000.00
<b>Totals</b>	<b>\$27,000.00</b>	<b>\$27,000.00</b>

### Implementation Funds

BMP's	Installed	Cost
Alternative Tile Intakes	190	\$53,829.45
Management Plans	2	\$3,150.00
Drainage Management Structures	7	\$9,728.25
Drainage Management	56.4 acres	\$1,348.03
Nutrient Management Plans	1	\$1,428.25
Nutrient Management	172 acres	\$5,755.18
Landowner Funds	\$26,666.67	\$31,750.43
<b>Total Implementation Funds</b>	<b>\$106,666.67</b>	<b>\$106,989.59</b>
<b>Total CWF</b>	<b>\$133,666.67</b>	<b>\$133,989.59</b>

#### Grant Period:

January 2013 - December 2016

#### Project Contact:

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## Project Narrative

Subsurface tile drainage is a water management practice increasingly utilized in agricultural fields in Minnesota to improve field access for planting and harvesting and to increase crop production. At the field scale, tile drainage typically reduces surface runoff by increasing subsurface runoff and increases total annual runoff volume by reducing water availability for evaporation, primarily during the spring and fall when crops are not growing. Conventional tile drainage can increase the loss of soluble crop nutrients from fields, such as nitrate nitrogen and soluble phosphorus, as well as increase the transport of herbicides, pesticides and pathogens. Increased runoff volume can, in turn, increase the risk of downstream flooding and sediment transport. The purpose of this program is provide information, financial, and technical assistance to farm operators for conservation practices that reduce the impact of tile drainage on the environment while maintaining or enhancing productivity.

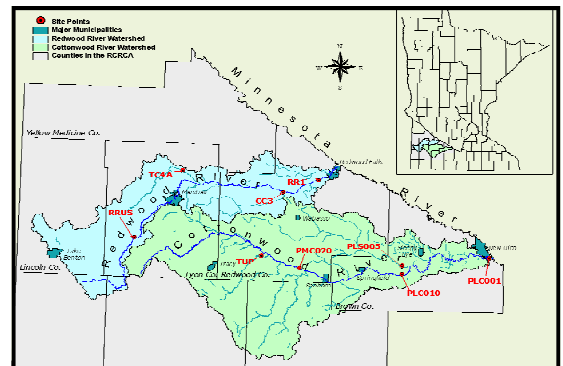
The 2012 Legislature provided additional Clean Water Funds for FY2013 to the Board of Water and Soil Resources (BWSR) in Chapter 264, Section 7(d) for the Conservation Drainage Program, with the intent to be used for Drainage Water Management (DWM) in coordination with Natural Resources Conservation Service (NRCS) practice standards. The appropriation language also allows the use of Conservation Drainage Program funding for water quality improvement practices on new tile drainage systems. Previous appropriations only allowed retrofitting of existing drainage systems. The BWSR Conservation Drainage Program and NRCS Environmental Quality Incentive Program (EQIP) funds will not be used for new tile, with the exception of dense pattern tile replacing existing open tile inlets for the BWSR program.

#### Project Sponsor:

Redwood-Cottonwood Rivers  
Control Area (RCRCA)

#### Targeted Waters:

Cottonwood River  
Redwood River



Clean Water Funds with a minimum 25% non-state match were used for the following practices: CAP 130 Drainage Water Management Plan; Structure for Water Control (CP 587); Denitrifying Bioreactor (CP 747); CAP 104 Nutrient Management Plan; and Subsurface Drain (CP 606) - alternative tile inlet. An incentive payment is available for Drainage Water Management Operation (CP 554) where controlled subsurface drainage structures have been installed, at \$7.58 per acre per year for the first three (3) years of implementation/operation, up to a maximum of 300 acres per cooperator. A CAP 130 Drainage Water Management Plan is required. An incentive payment is also available for Nutrient Management (CP 590) implementation on fields where controlled subsurface drainage and/or denitrifying bioreactors are implemented, and/or where existing open tile inlets are replaced. A CAP 104 Nutrient Management Plan is required. The incentive payment for the first three years of implementation is \$5.44 per acre per year for CAP 104 acres without manure and \$10.78 per acre per year for CAP 104 acres with manure, up to a maximum of 300 acres per cooperator.

#### Actual Outcomes:

Reduced Sediment (TSS) 190 tons/yr  
Soil Savings of 190 tons/yr  
Reduced Phosphorus of 285 lbs/yr