



Accelerated Implementation Grant

Water of Concern
Lower Minnesota River

Impairment
Dissolved Oxygen

CWL Funding by Category	
Technical Assistance Funds	
Technical Assistance	\$ 46,000
Total TA Funds	<u>\$ 46,000</u>
Implementation Funds	
AgBMP Loans	\$ 133,000
Cost-Share Funding	\$184,000
Total Imp. Funding	<u>\$ 317,000</u>
TOTAL CWL Funding	<u>\$ 363,000</u>

PROJECT CONTACT

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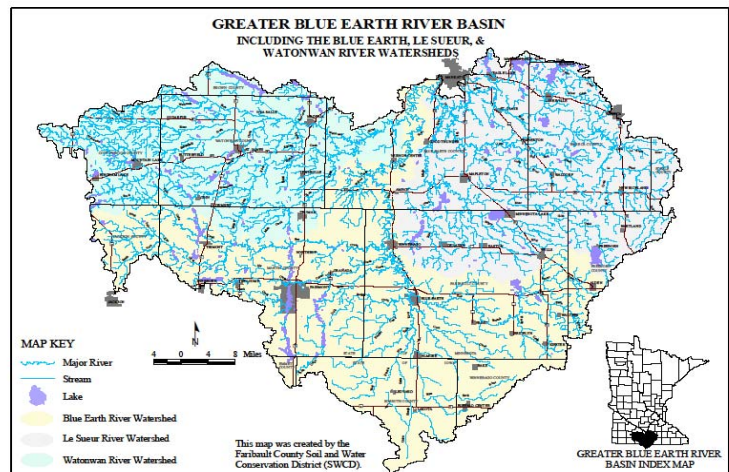
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Project Number:
07R31

Project Description

The Greater Blue Earth River basin consists of 2,049,037 acres in the Watonwan, Le Sueur and Blue River Basins. The Greater Blue Earth River Basin Alliance or GBERBA is a watershed based organization made up of nine counties including County Commissioners, SWCD Supervisors, County Water Planners, Environmental Services Staff and SWCD employees. The GBERBA Coordinators and bookkeeper administered the grant and reported back to the respective entities through Technical and Policy meetings.

Through this grant, GBERBA accelerated basin wide projects to lower phosphorus levels in the Great Blue Earth River Basin during low flow conditions in reference to the Lower MN River DO TMDL Implementation Plan. All projects included in this grant also support the GBERBA Watershed Plan dated November 18, 2005.



When focusing on the Dissolved Oxygen TMDL (low flow) this initiative funded best management practices and provided loan dollars that will have a measurable impact within the watershed. GBERBA worked through the nine County Technical Committee for the implementation of the cost-share funds. Districts identified eligible projects and submitted cost-share applications to the GBERBA Technical Committee for review, prioritization and approval. Projects were presented to the GBERBA Policy/Executive Boards for final approval. Through this process we feel that GBERBA provided the best technical and administrative opinions on each project.

Conservation Practices Implemented

Conservation Practices Installed	Units Installed	Soil Loss Reduction Tons/Yr	Sediment Reductions Tons/Yr	Phosphorus Reduction Lbs/Yr	Total C-S Funding
Alternative Tile Intakes	46 number	46.00	0.00	69.00	\$11,918.89
Diversion	634 feet	10.50	10.50	12.08	\$13,602.75
Grade Stabilization Structure	2 number	0.00	430.00	690.00	\$6,878.95
Grass Waterways	23,930 feet	848.48	32,187.10	23,768.37	\$38,161.60
Pond	1 number	3.00	0.00	6.00	\$16,125.00
Streambank and Shoreline Protection	1,150 feet	3.59	3.59	4.12	\$31,000.00
Terrace	2 number	5.28	1,156.49	1,145.51	\$30,637.00
Water and Sediment Control Basin	9 number	25.19	447.04	429.82	\$26,156.75
TOTAL		942.04	34,234.72	26,124.90	\$174,480.94

Contributing Partners

Partner	Description	CWL C-S Contribution	Partner Contribution
FSA-CRP	Project C-S	\$19,387.00	\$2,731.00
Clean Water Partnerships	Project C-S	\$13,510.70	\$32,415.67
NRCS-EQIP	Project C-S	\$35,032.39	\$73,907.10
Landowners	Contribution	\$174,480.94	\$105,513.37

Project Outcomes: detail specific project outcomes that work towards meeting Restoration (total maximum daily load studies) and Protection (local water plans) water quality goals

For restoration project, please include overall TMDL Point Source Reductions Needed (% & Pounds) Overall TMDL Non-Point Source Reductions Needed (% & Pounds) Estimated Total TMDL Non-Point Source Reduction (% & Pounds) from Projects

Under current land use practices, approximately 1,240 pounds per day of phosphorus is projected to be generated in the Basin during low flow conditions. The TMDL Report reduces the amount to 752 pounds per day during low flow conditions.

The Lower Minnesota River DO TMDL Implementation Plan calls for an overall 40% reduction in phosphorus entering the water course. Strategies to solve the problem involve decreasing the amount of phosphorus that reaches the river and increasing the amount of flow so low flow periods occur less frequently for shorter periods of time.

When comparing the reduction of phosphorus through the CWL Grant we are using the follow calculations:

$$\begin{aligned} 752 \text{ lbs} \times 90 \text{ days (low flow)} &= 67,680 \text{ lbs of Phosphorus (P) during low flow} \\ 26,124.90 \text{ lbs of P reduced per year} / 365 \text{ days} &= 71.58 \text{ lbs per day} \\ 71.58 \text{ lbs} \times 90 \text{ days} &= 6,442.20 \text{ lbs of P during low flow} \\ 6,442.20 / 67,680 &= 0.095 \text{ or } 10\% \end{aligned}$$

Non-point reduction of phosphorus for this Clean Water Legacy Grant equals a 10% reduction towards the Lower MN River Dissolved Oxygen TMDL.

Project Photos



Recently Constructed Waterways in the Greater Blue Earth River Watershed

