

1017-011 Tuttle Lake Watershed Final Report

Project Name: Tuttle Lake Watershed

Project Sponsor: Emmet SWCD

Length of Project: December 15, 2010- December 31, 2012

Counties included: Emmet

Total Watershed Improvement Funds Awarded for this project:	\$154,350.00
Total Watershed Improvement Funds Spent:	\$118,405.25
Total Watershed Improvement Funds Obligated:	\$0
Watershed Improvement Fund unobligated Balance as of 12/31/2012	\$35,944.75

Project Objectives:

- Administer the Tuttle Lake Watershed Improvement Project to ensure all objectives and implement all planned activities.
- Construct 2 wetlands, 125 Acres of farmable wetlands (or other approved), 23.2 acres of grassed waterways, 2 acres of filter strips and 2 grade stabilization structures on predetermined sites to have maximum benefit.
- Reduce pollutant delivered to Tuttle Lake by 152 tons of sediment per year
- Conduct an information and education program to increase awareness and knowledge of Tuttle Lake water quality issues and progress to watershed residents, lake users, and the local community.

Summary of accomplishments and water quality outcomes

As the Tuttle Lake Watershed project draws to a close, the measurable success lies in the percentage of treated watershed. Through the application of new practices and assurance that existing practices are still in working order, the project achieved just over 70% treatment in the Iowa portion of the Tuttle Lake watershed. Problem areas were targeted for maximum treatment resulting in the total reduction in sediment loading achieved was 53 tons. Total reduction in phosphorous loading is 85 pounds of phosphorus annually.

Financial Accountability

Summary: Watershed Improvement Funds

Grant Agreement Line Item	Total Funds Approved	Total Funds Approved Amended	Total Funds Expended	Available Funds
Technical Assistance	\$65,000.00	\$65,000.00	\$65,000.00	\$0
Engineering Design	\$6,000.00	\$6,000.00	\$0	\$6,000
Wetlands Development or Restoration	\$79,000.00	\$79,000	\$52,880.00	\$26,120.00
Grade Stabilization Structures	\$3,750.00	\$3,750.00	\$0	\$3,750.00
Filter Strips	\$600.00	\$600.00	\$305.00	\$295.00
Totals	\$154,350.00	\$154,350.00	\$118,185.00	\$36,165

Environmental Accountability

Summary: Practices and Activities

Practice or Activity	Unit	Approved Applications Total	Accomplishments	Percent Completion
Press Releases	Number	5	7	140%
Tours	Number	2	2	100%
Wetland Restoration	Number	2	1	50%
Grade Stabilization Structures	Number	2	0	0%
Filter Strips		2	1	50%
Farmable Wetlands	Acre	125	0	0%
Grassed Waterways	Acre	23.2	6.9	30%

As mentioned before, because of the climbing land values, there was significantly less participation in CRP program than was anticipated. Therefore the focus was shifted to other practices that could achieve the same sediment and phosphorus load reductions. Where there were existing practices, they were checked for stability. Visible erosion was located on 2 sites:

One landowner installed a grassed waterway through CRP (see table above) and in one other case the landowner corrected the erosion on their own without participating in financial assistance through the program. This occurrence was therefore not included in claimed ledger or in accomplishments as it likely did not meet NRCS specifications. Talking with the landowner one on one in the field proved to be the best strategy to understand what they foresee the needs to be and working toward a viable and affordable option. In any case, the landowners who made the effort to evaluate their conservation needs are more likely to continue participating in programs as they are available.

Summary: Total Project Funding

Funding Source	Approved From Application	Actual	Approved From Application	Actual	Approved From Application	Actual
Type	CASH	CASH	IN KIND	IN KIND	TOTAL	TOTAL
WIRB	\$154,350.00	\$118,405.25	\$0	\$0	\$154,350.00	\$118,405.25
CRP	\$254,692.00	\$11,500.00	\$0	\$0	\$254,692.00	\$11,500.00
USFWS	\$20,000.00	\$17,625.00	\$0	\$0	\$20,000	\$17,625.00
County	\$0	\$0	\$0	\$0	\$0	\$0
ODA	\$0	\$0	\$0	\$0	\$0	\$0
L. Owners	\$33,968.00	\$11,488.77	\$0	\$0	\$33,968.00	\$11,488.77
SWCD	\$12,805.00	\$13,836.26	\$0	\$0	\$12,805.00	\$13,836.26
Totals	\$475,815.00	\$172,855.28	\$0	\$0	\$475,815.00	\$172,855.28

Watershed Improvement Fund Contribution: Approved Budget: 32%
 Actual 68%

In the approved application budget, we had significant interest in the CRP Practices accounted for, however, land prices continued to rise and owners/operators opted out of several practices which they had verbally shared interest in implementing at the time of application submission. Because the CRP practices did not appeal to the landowners much, the portion of the budget that was to be provided through CRP dropped significantly. Having said that, after careful analysis, a shift was made to focus on a few bigger practices and really targeting the problem areas in the watershed with significant erosion. In an effort to guarantee that the wetland(s) were implemented, the US Fish and Wildlife Service offered to provide cost-share. The wetland that was installed treats a large portion of the watershed by trapping sediment and the grassed waterways were placed in strategic locations to prevent gully erosion, further reducing sediment loading. The proposed grade stabilizations proved too difficult and/or too costly to implement according to the landowners involved.

The Emmet SWCD wishes to acknowledge the assistance the project received by members and staff of the Emmet County Conservation Board, USFWS, Landowners, and the members Okamanpedan Development Association and thank them for their cooperation.