

# **WIRB Final Report**

**Project Name: Coe Creek Watershed Project**

**Project Number: 1109-003**

**Huc #: 10240003**

**City of Elliott**

**Planning Period: January 1, 2012 to December 31, 2013**

**Date Report Prepared: July 1, 2013**

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## **INTRODUCTION**

The city of Elliott over time has had an increase in nitrate levels in their community water supply. With help from the Iowa DNR SWP program and a multitude of other environmental agencies and groups a plan was developed to combat the rising nitrate levels. A wetland was proposed north of town to intercept the source of nitrate from neighboring farm fields. With the help of the WIRB funding was put in place to purchase land and construct the wetland. The wetland project has grown into an all-around community betterment project with the installation of a walking trail and outdoor classroom.

At this time all of the WIRB funded items are complete. The outdoor classroom will be constructed this summer.

## **FINANCIAL ACCOUNTABILITY**

The primary cost share mechanism used in this grant was the Watershed Improvement Review Board funds contributing \$166,460 or **59.5%** of the total funds expended. The city of Elliott contributed \$16,984.33. Dollars from other grants for the excavation and native grass seeding totaled \$36,760.50. Montgomery County donated \$18,500 in in-kind work with the raising of the road, excavation, and the construction of a poured concrete box riser. In kind contributions in the form of engineering services from NRCS and IDALS totaled \$16,925.03. Griswold schools donated 4.083 acres of land for the project which has an estimated value of \$31,900.

### **WIRB Funds Expended by Line Item**

<b>Grant Agreement Budget Line Item</b>	<b>Total Funds Approved(\$)</b>	<b>Total Funds Approved-Amended (\$)</b>	<b>Total Funds Expended (\$)</b>	<b>Available Funds (\$)</b>
Land Survey	\$3,500	\$2,192	\$2,192	\$0
Land Purchase	\$108,460	\$111,768	\$111,768	\$0
Cultural Resources Assessment	\$4,500	\$2,500	\$2,500	\$0
Wetland Structure & Excavation	\$50,000	\$50,000	\$50,000	\$0
Totals	\$166,460	\$166,460	\$166,460	\$0
Difference				\$0

**Funding Expended by Source**

<b>Funding Source</b>	<b>Cash</b>		<b>In-Kind Contributions</b>		<b>Total</b>	
	<b>Approved Application Budget (\$)</b>	<b>Actual (\$)</b>	<b>Approved Application Budget (\$)</b>	<b>Actual (\$)</b>	<b>Approved Application Budget (\$)</b>	<b>Actual (\$)</b>
WIRB	\$166,460	\$166,460			\$166,460	\$166,460
MONT. CO.	\$0	\$0	\$18,500	\$18,500	\$0	\$18,500
MCCB	\$1,000	\$1,000			\$0	\$1,000
MONT. PF	\$2,000	\$2196.50			\$0	\$2196.50
POTT. PF	\$2,000	\$2,000		\$0	\$0	\$2,000
CITY		\$16,984.33	\$11,200	\$20,442		\$37,426.33
SCHOOL			\$31,900	\$31,900		\$31,900
NRCS			\$5,000	15,345.03		\$15,345.03
Other Sources						
Totals	\$171,460	\$188,640.83	\$66,600	\$86,187.03	\$166,460	\$274,827.86

Approved WIRB contribution percentage 70 %  
 Actual WIRB contribution percentage 0%

**ENVIRONMENTAL ACCOUNTABILITY***Project Goals:*

The goals of the City of Elliott were.. 1) Acquire land adjacent to the existing wetland and expand the wetland as a long term method to reduce nitrates in the city wells. 2) Plant native grasses and incorporate nutrient management practices 3) Continue to inform and educate the residents of the community and the watershed about BMPs they can install to improve water quality in the region and how they can positively impact groundwater supplies.

*Practices Installed/Environmental Benefits:*

The following table quantifies the types and number of practices actually installed and their sediment delivery reduction:

<b>Grant Agreement Conservation Practices &amp; Activities</b>	<b>Unit</b>	<b>Approved Application Goal</b>	<b>Accomplishments</b>	<b>% Completion</b>
Land Survey	Num	1	1	100%
Land Purchase	Acres	18.7	17.3+4.083 donation=21.38	114%
Cultural Resources Assessment	Num	1	1	100%
Wetland Structure & Excavation	Num/ yds	1 22,300 yds	1 25,306	113%

The wetland installed meets project goals. Twenty one point three acres of wetland, including a native grass buffer was constructed. The native grass buffer was seeded to a diverse 90 specie mix to mimic a native prairie.

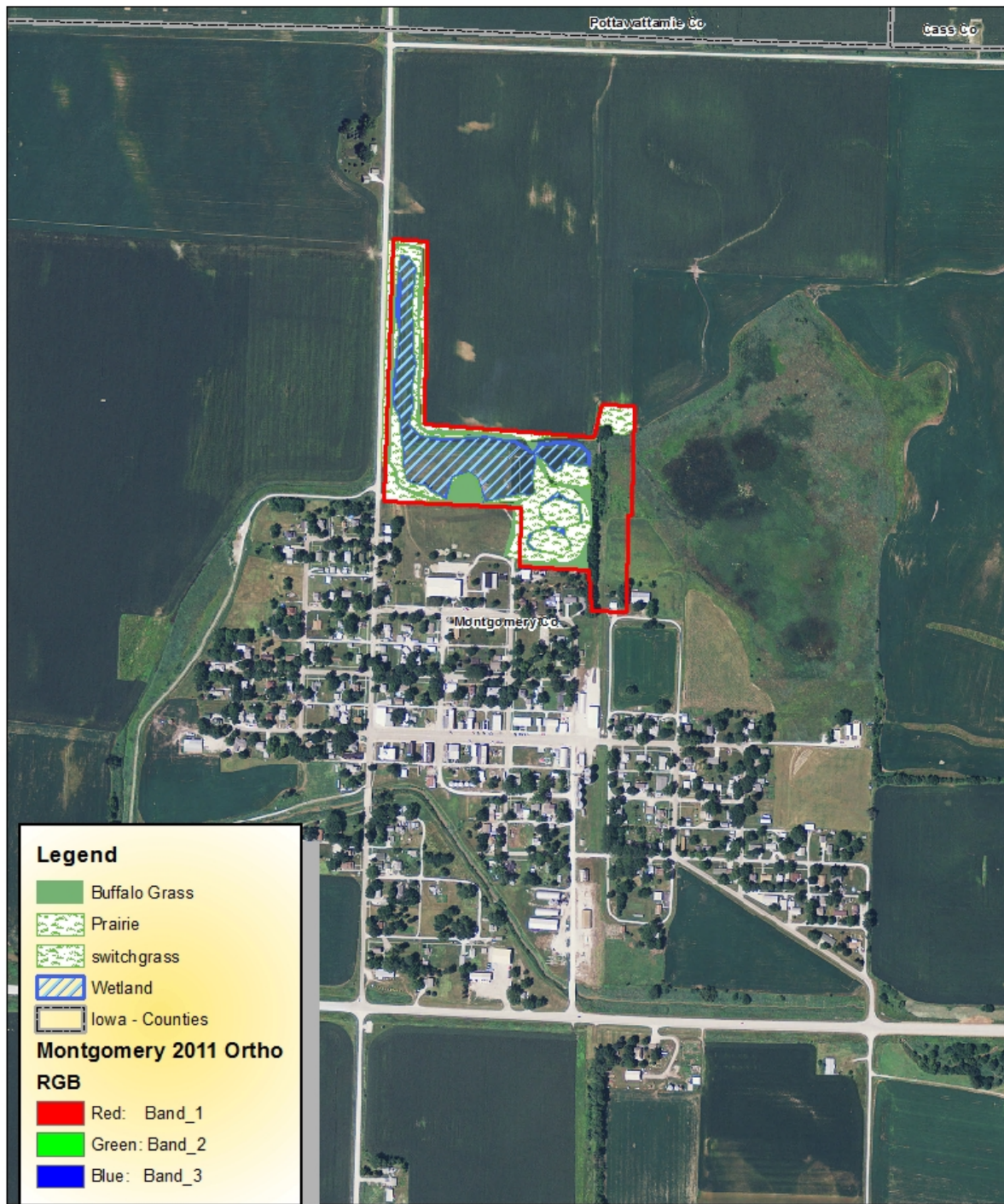
Expected reductions in nitrate from our efforts are predicted to begin in 1-3 years. The wetland area needs to be well established with vegetation before it will produce the necessary amount of carbon to effectively reduce the nitrates from groundwater flowing under the wetland. An excellent baseline of water monitoring data has been established. City wells will continue to be monitored daily. Iowa DNR will also install test wells above and below the wetland to further monitor the wetland effectiveness.

## Elliott SWP Project-Before





## Elliott SWP Project







Concrete Riser with water control structure





Wetland Pool Created

## **PROGRAM ACCOUNTABILITY**

### *Administration:*

This project was administered by the City of Elliott. Project funding was managed by the Elliott City Clerk. The city also hired a consultant to help with project management. Golden Hills RC&D also aided in organizing meetings, grant writing, etc.

### *Deviations from original grant:*

Wetland acres purchase deviated slightly from the original grant due to the fact the private landowner would not sell all that we wanted. More of the wetland was excavated than originally planned. Land purchase price was also higher than anticipated due to an explosion in land values in the area.

Additional grants were sought after for the excavation as well as an outdoor classroom, walking trail, bridge, wetland walkway, and educational materials. Many were received. Approximately \$92,000 has been received to support the additional activities. Soon the elementary school and local residents will be able to learn about native prairie and wetlands as well as enjoy the beautiful area we have created.

### *Future Watershed Work:*

Future watershed work should involve installing conservation on the uplands whenever and wherever possible. Soaring ag commodity prices could affect future land uses. Practices such as cover crops and other nutrient reduction activities should be promoted.