# Competine Creek Partnership Project 1224-012 January 1, 2013 through September 30, 2015 Final Report

# **Financial Accountability**

# **Watershed Improvement Funds**

Grant Agreement Budget Line Item	Total Funds Approved (\$)	Total Funds Approved- Amended (\$)	Total Funds Expended (\$)	Available Funds (\$)
Salary and Benefits	\$ 25,000	\$ 25,000	\$ 25,000	\$0
Grade Stabilization Structures	\$ 67,000	\$ 67,000	\$ 67,000	\$ 0
Contractual	\$ 8,000	\$ 8,000	8,000	\$ 0
Total	\$ 100,000	\$ 100,000	\$ 100,000	\$ 0
Difference				\$ 0

## **Total Project Funding**

	Cash		In-Kind Contribution		Total	
Funding Source	Approved Application Budget (\$)	Actual (\$)	Approved Application Budget (\$)	Actual (\$)	Approved Application Budget (\$)	Actual (\$)
WIRB	\$ 100,000	\$ 100,000.00			\$ 100,000	\$ 100,000.00
WSPF	\$ 200,000	\$ 117,709.18			\$ 200,000	\$ 117,709.18
EQIP	\$ 307,500	\$ 347,366.27			\$ 307,500	\$ 347,366.27
IFIPS	\$0	\$ 32,959.00			\$0	\$ 32,959.00
Landowner	\$ 191,500	\$ 471,592.94			\$ 191,500	\$ 471,592.94
WPF	\$ 75,000	\$ 199,043.02			\$ 75,000	\$ 199,043.02
Pekin FFA water monitoring			\$ 1,500	0	\$ 1,500	0
Total	\$ 874,000	\$1,268,670.41	¥2		\$ 875,500	\$ 1,268,670.41

Watershed Improvement Fund contribution: Approved application budget:	8	11 %
Actual:		7.9 %

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#### **Environmental Accountability**

To estimate the sediment delivery reduction we used the sediment delivery calculator for approved practices. We estimated a 2,509 ton reduction of sediment per year from reaching Competine Creek. We surpassed our goal of 2,016 t/yr, by 24%. Total estimated phosphorus reduction was 3,261.7 lbs. per year.

Grade Stabilization structures have been constructed to control 502 acres of runoff water. Our original goal was to control 500 acres.

Our original goal for water monitoring was to work with Pekin FFA students to continue monitoring in Competine Creek through IOWATER protocols that we had worked with them in the past as a means of education for the students. The summer of 2013 was too dry to collect water samples and organizing the events fell through in 2014. We have continued to work will the FFA students by speaking in the class room about water quality and their local watershed.

Two field days were held on cover crops in the watershed as well as film night presenting the documentary "Symphony of the Soil".

#### **Practices and Activities**

Practice or Activity	Unit of Measure	Approved Application Goal	Accomplishments	Percent Completion
Terraces	Feet	50,943	91,485	179%
Water and Sediment Control Basins	Number	10	4	40%
Grade Stabilization Structures	Number	5	4	80%
Field Days	Number	2	3	150%
Acres Protected	Acres		1,123	
High Priority Acres Treated	Acres	901	914	101%
On Farm Contacts	Number		45	
Water quality Monitoring	Site-year samples	12	0	0%

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#### **Program Accountability**

Much of the work of locating sites for grade stabilization structures was done in advance of this project being funded. We did, however, have significant difficulty in getting DNR permitted structures designed in a timely manner. Hiring private engineers to design structures can be beneficial from a time standpoint but care should be taken to make sure they are experienced with NRCS protocols and specifications. Using NRCS engineering can take a longer time to develop designs and it is recommended to utilized EQIP funding to help prioritize the structure in their workload. We have not yet determined the most effective way to get structures designed but planning for this step and budgeting enough time into the grant should be taken into consideration when planning for a new grant-funded project.

The Cedar Creek Partnership Project kicked off in 2014. Competine Creek is a sub watershed of this project and as such we have been promoting cover crops heavily within the watershed. Producers seeded 494 acres of cover crops in 2014 and 728 acres have been signed up in 2015. In addition to the soil health benefits and nutrient reduction that cover crops provide, the primary reason for producers planting cover crops in our area seems to be erosion control.

Over the course of the project we averaged 59% cost share for all completed projects with a maximum cost share of 75%. High priority areas were designated as those that had a sediment delivery rate greater than one ton per acre per year. Sites were first screened by checking our original assessment map of high priority sites. Final determination of eligibility for high priority status was determined by running the sediment delivery calculator on the project acres. Projects that met high priority standards for rates of sediment delivery were funded at 75% of our estimates while those projects that did not were funded with partnering funding sources at 50% of estimated costs. Ranking projects for funding was done on a cost per ton of sediment delivery reduction estimate (e.g. How much the project would cost divided by the estimated tons of sediment delivery reduction per year.) Many of the projects that did not meet the high priority standard of one ton per acre sediment delivery actually ranked higher than those that did meet the threshold. This can be accounted for by the larger number of acres that can be treated with the same footage of terraces (e.g. wider spacing) when they are on flatter slopes with lower erosion rates.

In the opinion of the watershed coordinator, future consideration should be given to funding high priority sites based on their cost effectiveness for reducing sediment delivery rather than on sediment delivery per acre figures. Sediment delivery rates are also largely affected by tillage and management practices. Consideration should also be given to estimating sediment delivery rates based on a set management practice so as not to incentivize funding to producers who are using highly erosive management practices.

