

Miller Creek Water Quality Improvement Project

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Watershed Project Coordinator

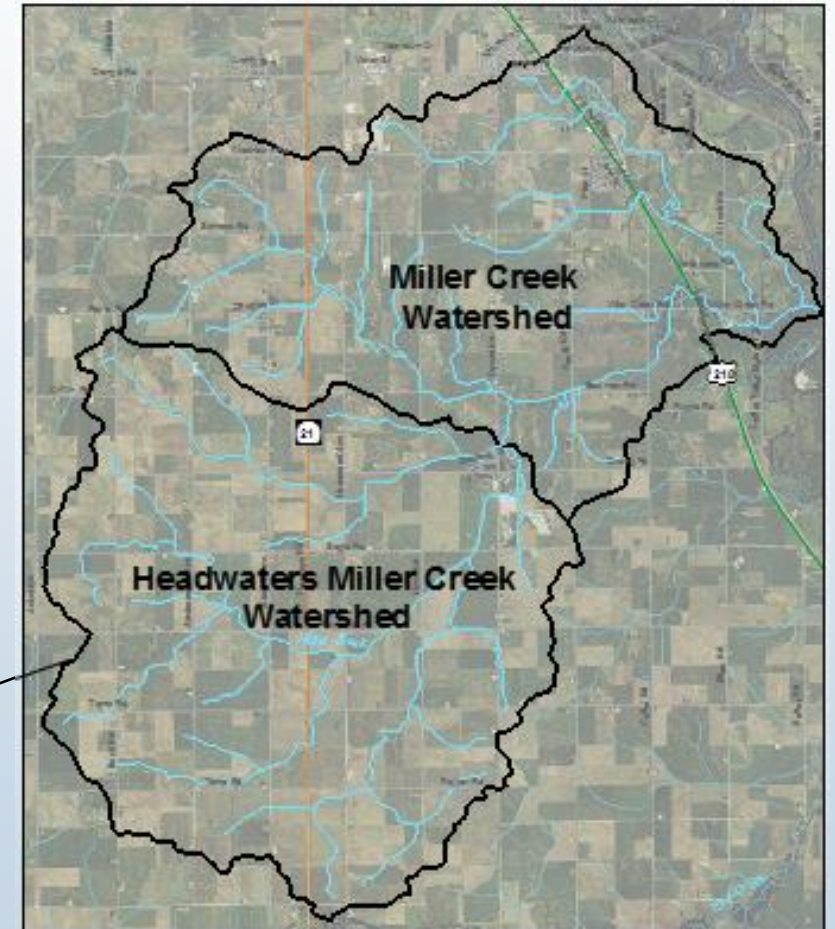
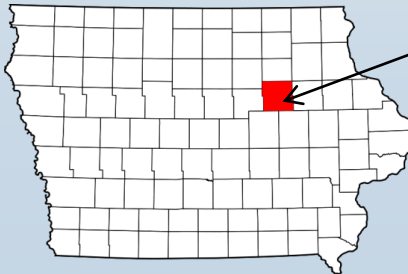
Black Hawk SWCD

September 21, 2017



Miller Creek

- Project led by Black Hawk SWCD
- 42,461 acres in Black Hawk and Tama counties
- 135 producers/230 landowners
- 89% row cropped
- Historically high sediment delivery to county ditches
- WRCC Priority HUC 8 Middle Cedar Watershed





Phase 1 – Demonstration

- One of eight initial WQI Demonstration Project awards
- \$499,530 WQI grant award, \$751,501 total project
- January 1, 2014 – December 31, 2016
- Project Objectives
 - Outreach and Education
 - Technical Assistance
 - Financial Assistance
- Develop relationships with “early adopters”

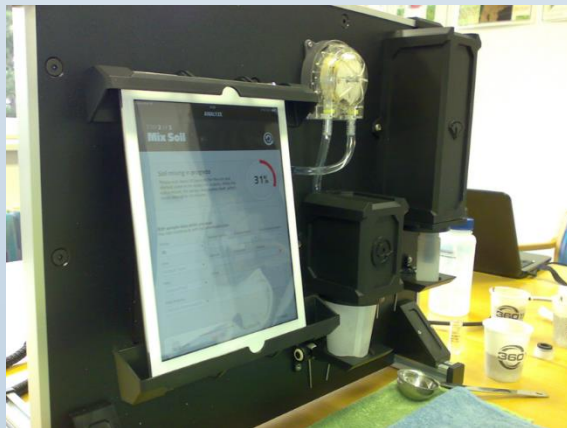
Outreach and Education

- Field Days
- Newsletters
- Billboards and field signage
- Presentations, Booths & Tours
- Media Outreach
- Coffee Shop Hours
- Social Media
- Visits from Governor Reynolds, Secretary Northey, former USDA Secretary of Ag Vilsack, etc.



Evaluation Tools

- Iowa Soybean Association Water Monitoring
- IIHR/Iowa Flood Center Continuous Nitrate Sensor
- Tillage Inventory
- 360 SOILSCAN
- Haney Soil Health Testing
- Producer/Landowner Interviews



2014-2016 Practice Implementation

Practice	Funding Source	2014	2015	2016	Total
Cover Crops (ac.)	WQI	1,057.00	2,703.07	3,196.52	6,956.59
Cover Crops (ac.)	EQIP/RCPP	205.91	255.10	372.80	833.81
Nitrification Inhibitors (ac.)	WQI	551.00	1,019.48	1,047.77	2,618.25
Strip-Till/No-Till (ac.)	WQI	0	1096.60	916.30	2,012.9
Bioreactors (no.)	EQIP	0	1	1	2
Saturated Buffer (no.)	WQI/ISU	0	1	1	2

Practice Implementation



2014-2016 CRP Contracts in Acres

Practice	Funding Source	2014	2015	2016	Total
Grassed Waterways	CRP (CP-8)	0	4.68	0	4.68
Filter Strips	CRP (CP-21)	5.00	76.19	64.68	145.87
Riparian Buffer	CRP (CP-22)	0	11.01	0	11.01
Pheasant Recovery	CRP (SAFE)	0	120.32	0	120.32
Farmable Wetland	CRP (CP-27 & CP-28)	0	0	1.48	1.48
Pollinator Habitat	CRP (CP-42)	0	580.98	485.03	1,066.01

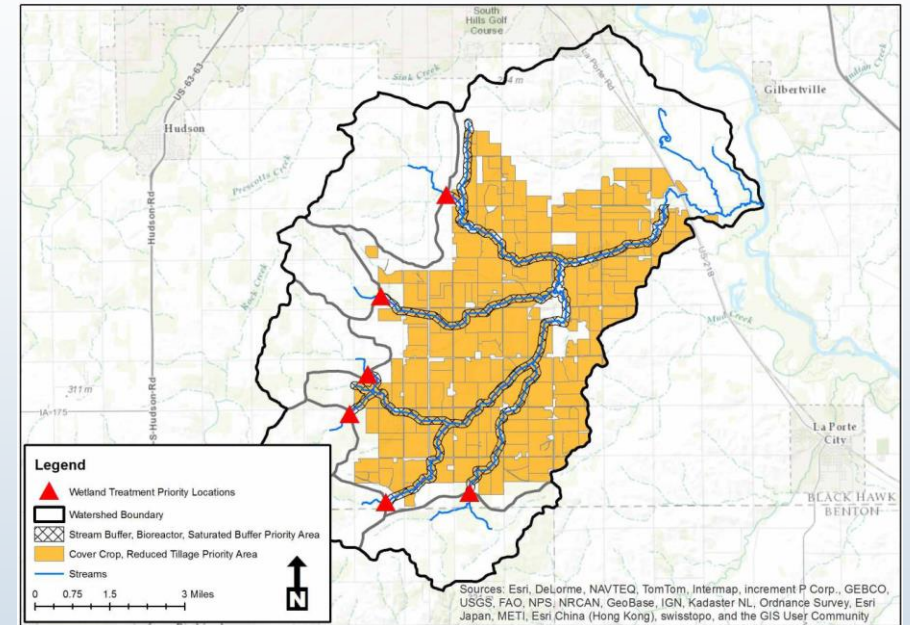


Phase 2 - Implementation

- \$517,026 WQI extension, \$772,216 in Partner and Landowner Contributions
- January 1, 2017 – December 31, 2019
- Updated Objectives
 - Targeted Outreach and Education
 - Technical Assistance
 - Financial Assistance
- Recognize “early adopters” as champion farmers and encourage those “on the fence” to try at least one practice

Targeted Efforts

- Watershed Management Plan
- Water Monitoring Data
- Agricultural Conservation Planning Framework (ACPF) Tool
- Soil Health Evaluations



2017 Field Days

Edge of Field Workshop July 20, 2017



Soil Health Partnership Field Day August 3, 2017



2017-2019 Practice Implementation Goals

Practice	Cost-Share Rate	2017	2018	2019	Total
Cover Crops	\$20/acre winter kill \$30/acre winter hardy	1,500	2,000	2,500	6,000
Strip-Till/No-Till	\$10/acre	1,000	1,000	1,000	3,000
N Inhibitors (Fall)	\$6/acre	1,000	1,500	2,000	4,500
N Application Rate Management	\$10/acre	500	750	1,000	2,250
Saturated Buffers	50% or up to \$3,000	2	3	4	9
Bioreactors	50% or up to \$5,000	1	2	3	6

2017 Practice Sign Ups

Practice	Funding Source	Acres/Systems
Cover Crops	<ul style="list-style-type: none">• Water Quality Initiative (State)• Regional Conservation Partnership Program (Federal)• Conservation Stewardship Program (Federal)	6,508 acres
Strip Till	<ul style="list-style-type: none">• Regional Conservation Partnership Program (Federal)	357 acres
Nutrient Management	<ul style="list-style-type: none">• Regional Conservation Partnership Program (Federal)	145 acres
Conservation Cover	<ul style="list-style-type: none">• Resource Enhancement and Protection (State)	1.55 acres
Windbreak	<ul style="list-style-type: none">• Resource Enhancement and Protection (State)	1 system

Local Support and Staff

- Miller Creek Advisory Council
- Black Hawk SWCD Commissioners
- NRCS and IDALS Staff
- Jason Gomes, Middle Cedar Partnership Project Coordinator



Partnerships



Miller Creek Challenge Grant

- \$27,000 practice deficit in 2017
- Overwhelming demand for cost share funds
- Iowa Agriculture Water Alliance has committed \$13,500
- Awareness and fundraising opportunity
- Engage media, general public and businesses
- More details to come!



Future

Table 11 Targeted implementation schedule.

	<i>Practice</i>	<i>Existing Level</i>	<i>Unit</i>	<i>2015-2020 Goal</i>	<i>2020-2025 Goal</i>	<i>2025-2030 Goal</i>	<i>2030 (Watershed Plan) Goal</i>
Soil Health/Conservation	<i>No-Till/ Strip-Till</i>	<i>1,000+</i>	<i>Acres</i>	<i>Maximum acres possible</i>			
	<i>Cover Crops</i>	<i>2,900 est.</i>	<i>Acres</i>	<i>5,000</i>	<i>6,000</i>	<i>5,000</i>	<i>18,900</i>
	<i>4R Nutrient Management</i>	<i>Unknown</i>	<i>Acres</i>	<i>Maximum acres possible</i>			
	<i>Perennial Cover (CRP)</i>	<i>Unknown</i>	<i>Acres</i>	<i>200</i>	<i>200</i>	<i>100</i>	<i>500</i>
	<i>Nitrification Inhibitor</i>	<i>Unknown</i>	<i>Acres</i>	<i>2,000</i>	<i>1,000</i>	<i>1,000</i>	<i>5,000</i>
In-Field	<i>Grassed Waterways</i>	<i>710,600</i>	<i>Feet</i>	<i>Where needed</i>			
	<i>Terraces</i>	<i>260,000</i>	<i>Feet</i>	<i>Where needed</i>			
Edge of Field	<i>Streamside Buffers</i>	<i>80%</i>	<i>Feet</i>	<i>Where needed</i>			
	<i>Bioreactors</i>	<i>3</i>	<i>Number</i>	<i>10</i>	<i>5</i>	<i>5</i>	<i>23</i>
	<i>Saturated Buffers</i>	<i>1</i>	<i>Number</i>	<i>5</i>	<i>6</i>	<i>5</i>	<i>17</i>
In-Stream	<i>Nitrate Removal Wetlands</i>	<i>0</i>	<i>Number</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>6</i>
	<i>Streambank Stabilization</i>	<i>0</i>	<i>Feet</i>	<i>750</i>	<i>1,000</i>	<i>550</i>	<i>2,300</i>

Iowa Farm Environmental Leaders in Miller Creek



Thank You!

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