



A letter from the Project Coordinator

Dear Reader,

I've had the opportunity to be the project coordinator for Black Hawk Creek Watershed since the end of August and it's been a blast! I'm a recent graduate from the University of Northern Iowa where I studied Environmental Science, Earth Science and Geology. I am an Avid Outdoorsman, growing up on the Mississippi River I developed a passion for hunting, fishing, camping and kayaking. Through my time spent outside and my background in dairy farming I became a passionate advocate for conservation, sustainable agriculture and water quality restoration.

As coordinator we have been able to establish water quality testing, where we will be sampling 10 sites within the priority watersheds. We will be testing for levels of Dissolved Oxygen, Turbidity, Total Dissolved Solids and Nitrate, if you would like to get involved in the sampling process give us a call!

Within my first three years as project coordinator I would like to see more producers and younger residents involved in water quality testing, host education events, expand the project's funding to provide a more targeted approach to meet the needs of Iowa Nutrient Reduction Strategy. I also see expanding the project to contain an urban component to bridge the gap between communities across the watershed. One of my favorite parts of the job is to get out into the watershed and meet producers to do farm visits, so please give us a call or send me an email so we can set up a time to meet and talk about your operation and how the project can get involved!

-Faith Luce



Faith checking tile lines in a survey for a saturated buffer site.

Winter 2021

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Field offices are in the process of phased reopening and employee return. We are not open to the public yet. Please call the office first to see how we can assist you. 319-824-3634

Cost Share Available

- Cover Crops**
- Fall Strip till**
- Spring No till or Strip till**
- Tile Treatment Wetlands**
- Saturated Buffers**
- Bioreactors**
- Prairie Strips**
- Oxbow Restoration**

For more information call your local field office!



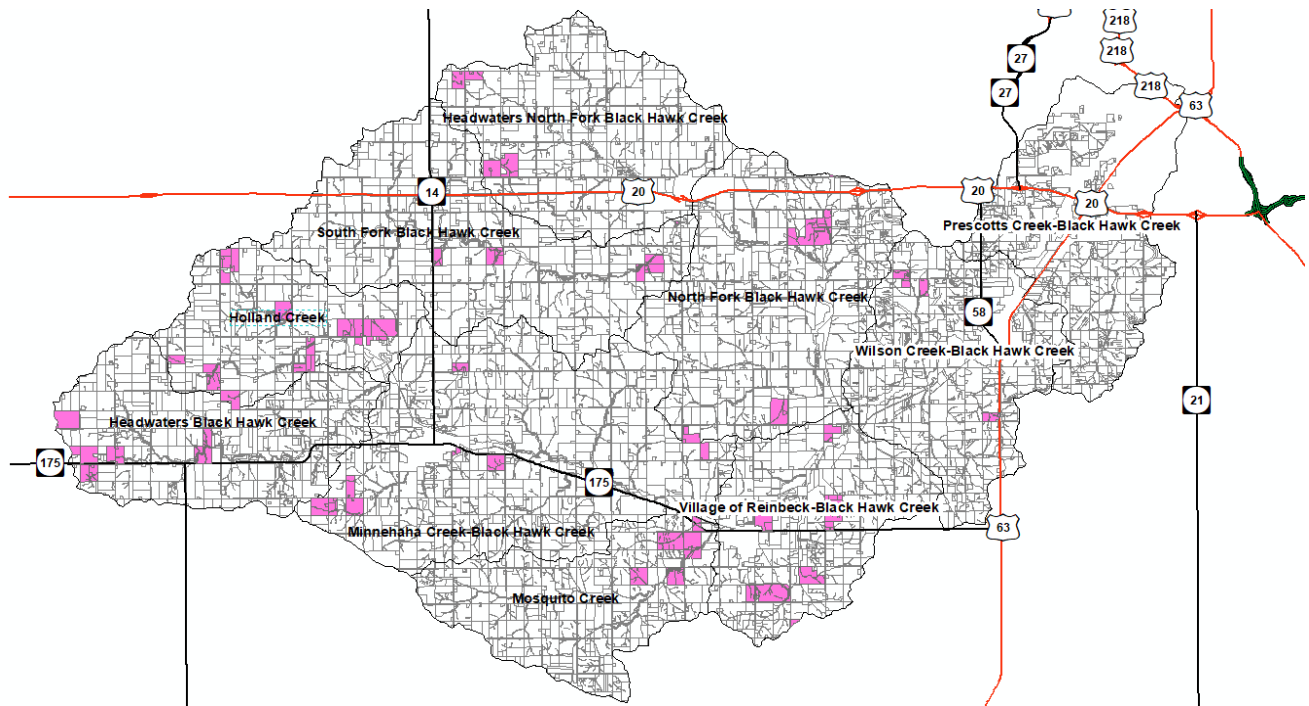
Watershed News

Project Grant:

This past June we were awarded a \$437,000 grant to continue the project through June 30, 2023. The grant is between Iowa Department of Agriculture and Land Stewardship and Grundy Soil & Water Conservation District. These funds provide salary for a full-time project coordinator, water sampling, outreach and education, the implementation of conservation practices.

2020 Cover Crops:

For 2020 BHCW had 21,000 acres of cover crops (10% of watershed). This is an increase from 10,000 acres (4.6%) in 2019. EQIP&CSP (9600 acres), Federal Cost-Share (6,600 acres), Seed Corn Pilot Project acres (5,000).



Water Sampling:

-10 sample sites that have been selected within the watershed for monitoring. The sites are concentrated over the three priority watersheds of Holland Creek, Village of Reinbeck and Wilson creek. Samples will be taken bi-weekly from the months of April through November. The parameters being tested are turbidity, dissolved oxygen, nitrates and total dissolved solids. Sampling will begin spring 2021. Please contact me if you would like to be involved in collecting samples.

- Turbidity: Indication of the accumulation of suspended solids from soil erosion, algae and runoff.
- Dissolved Oxygen: Main indicator of a waterbody's biological health.
- Nitrate: indicates the quantity of nutrients are being introduced from fields to waterways via drainage tile.
- Total Dissolved Solids: Amounts of DO and inorganics in water, is altered by agricultural runoff, soil leaching and effluent from sewage plants.



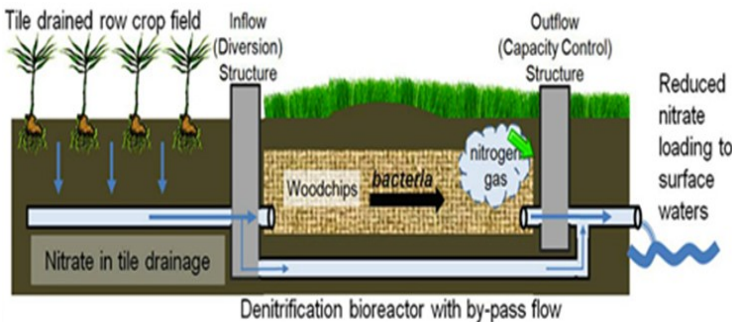
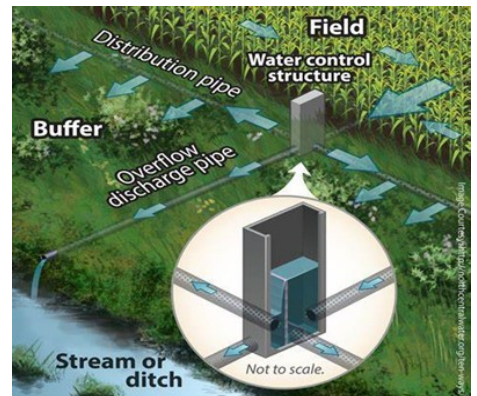
Edge of Field Practices

Oxbow Reconstruction- Oxbows create great wildlife habitat and provide flood storage, in addition to treating tile water for Nitrogen. Good sites for oxbows are ones where there is tile nearby and where there is evidence of the old channel.

Constructed Wetland- Wetlands act to remove nutrients from tile water. They are placed in the landscape to maximize drainage area and nutrient removal, as well as providing wildlife habitat and hunting opportunities.

Prairie Strips- Prairie strips provide many ecosystem services including habitat for beneficial insects and wildlife. Prairie plants help protect and build the soil as well as reduce nutrient movement into waterways. The addition of pollinator habitat in soybean fields may boost yields. Consider planting prairie strips on unproductive areas and field edges. CRP offers \$269/ac.

Saturated Buffers- A saturated buffer may be the thing for you. A saturated buffer reroute drainage water from tiles into a control box into two lateral distribution lines that extend into buffer zones allowing for absorption of nitrogen by plants. These are best placed in established CRP filter strips!



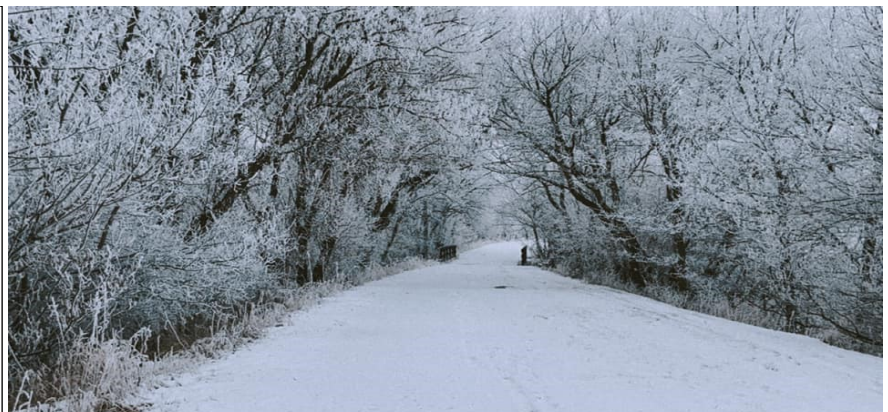
Bioreactor- A bioreactor functions similarly to a saturated buffer but has less restriction in location. A portion of the tile water is diverted into the bioreactor chamber filled with wood chips. The nitrate in the tile water is treated (denitrified) and returned to the drainage tile.

Cost-share: Up to 75%

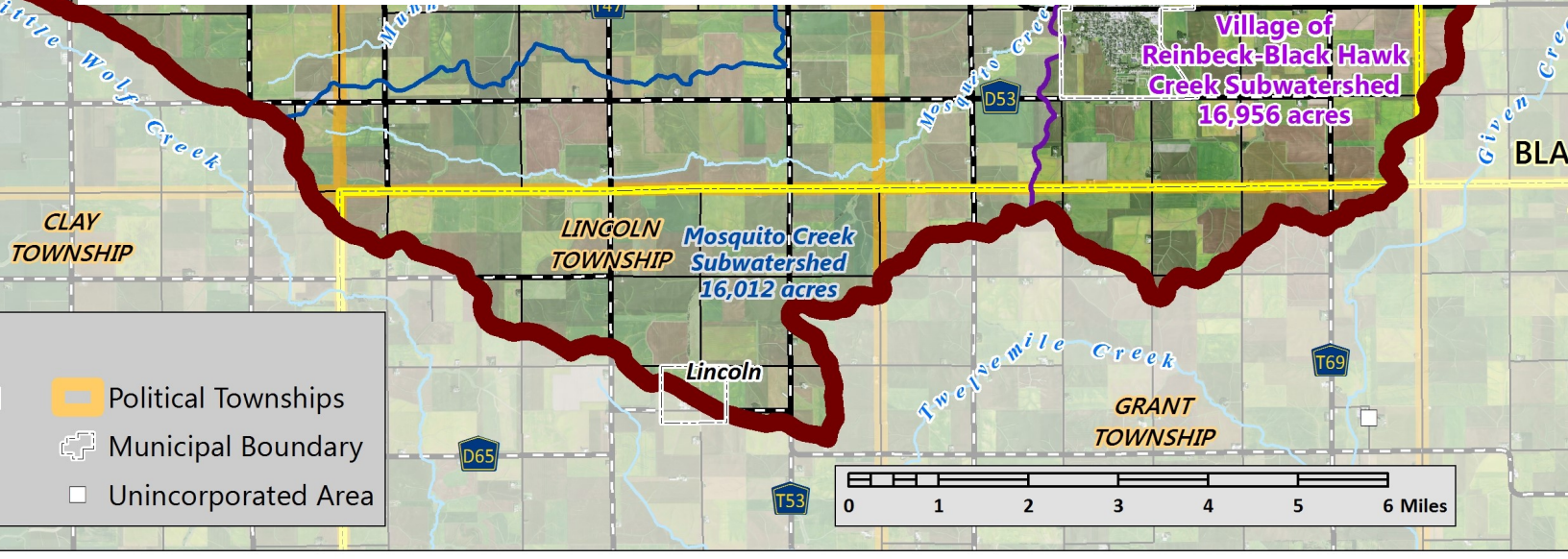
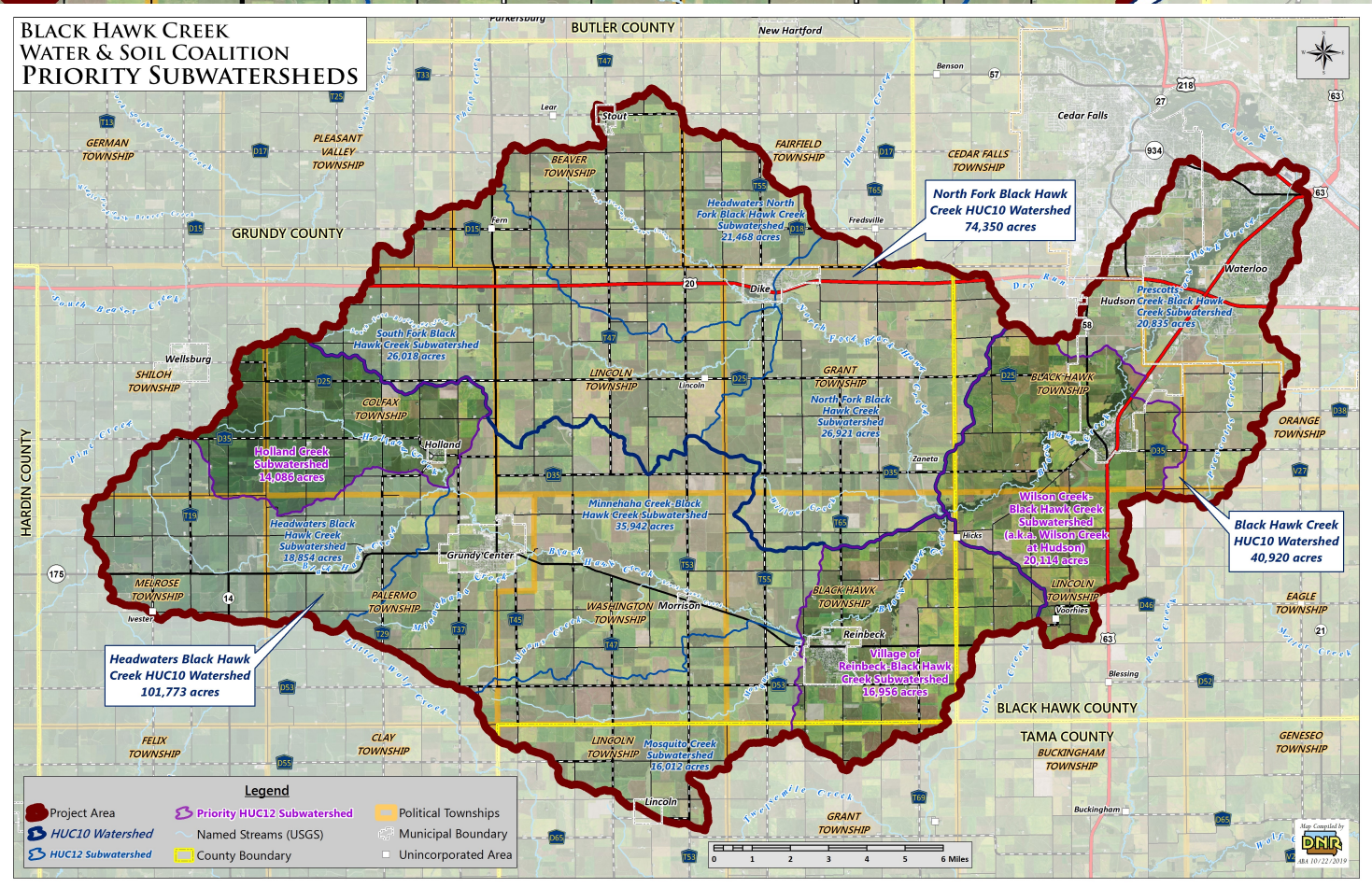
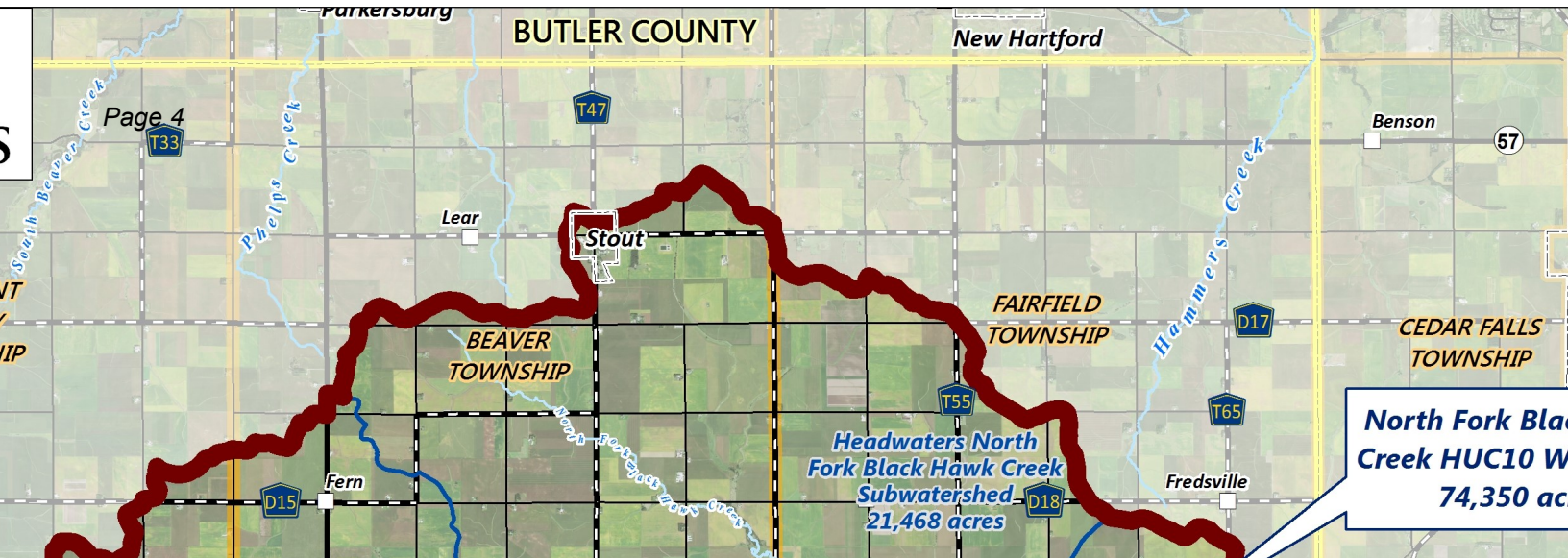
EOF practices are a great way to implement a long-term conservation practice that doesn't affect the way you farm. Areas that have at least 15 acres of pattern-tiled drainage are well suited to saturated buffers and bioreactors.

To see if your farm is suitable for an EOF practice you can go to

<https://acpf4watersheds.org> or give us a call!



Signs of winter along the Pioneer Trail in Holland. Picture by Faith Luce.





Conservation Conversation



One of our producers in our watershed, Steve seeding cover crops using his Miller sprayer outfitted with tubing and a seed box. Steve seeded a mix of rye, wheat and hairy vetch at a rate of 60 lbs/acre. It was very awesome to see in action!

Meet our watershed's dynamic mother-daughter duo Connie and Shirley! The family has been farming within the watershed for many generations and are conservation minded.

Connie and Shirley are implementing some pollinator and prairie strips into practice on the land they are standing in front of! Their motivations stem from the land's long history of flooding. Their tenant brought to them the idea of taking the cropland out of production. Once planted they are excited to have the practice bring flowers, wildlife and erosion control.



To stay updated on producer stories on their experiences adopting conservation practices follow our Facebook page: Black Hawk Creek Watershed Improvement Project. If you would like to share your journey with conservation send an email to me at faith.luce@ia.nacdnet.net. We want to highlight the efforts you are taking to ensure that our soils stay healthy, productive and our waters clean!



In Field Conservation Practices

Why In-field Practices?

In field practices are a great introduction to conservation practices, the funding is readily available and they aren't a long-term commitment. You can tailor the seeding and termination of your cover crops to help improve resource concerns. For example if you have issues with compaction you could plant cereal rye and do no-till. In field practices are efficient in creating organic matter, as well as to help maintain organic matter on the field. With the increase in organic matter soil microbes are able to thrive, reducing your need for added fertilizer and pesticides.

Follow These Soil Health Principles and See Benefits in Just a Few Years:

1. Keep It Covered
2. Have Active Living Roots as Many Months of the Year as Possible
3. Do Not Disturb
4. Add Diversity to What You Grow

Cover Crops-Cover crops improve soil quality by reducing erosion, soil nutrients, reducing soil compaction, improving organic matter and nutrient cycling, and improved water infiltration.

Seeding Methods:

1. Drilling: ensures seed-to-soil contact promoting faster germination using less seed.
2. Precision planting with 15-inch rows: allows for better soil tilth and faster nutrient uptake.
3. High-clearance applicator: The application occurs while the crop is still standing.
4. Aerial seeding: great with a wet, late harvest.
5. Vertical tillage: seed at same time, as a quick and inexpensive option.
6. Seed while you combine: Seed loss is minimal.

Cost-Share: \$15/ac winterkill and \$30/ac winter-hardy crops, there is no cap on acres for cover crops. However those within priority watersheds (Holland, Reinbeck and Hudson) will have top priority.

No-Till- beneficial in retaining the natural structure of soil (reducing erosion) and carbon and other nutrients stored within the soil. As well as reducing fuel, labor, and equipment costs. It takes time to see the benefits of no-till, soil needs time to regain structure. No-tillage is recommended ahead of soybean regardless of location, slope, or drainage.

Strip-Till- benefits include reduced soil erosion, increased soil organic matter and reduced phosphorus entering waterways, as well as increased soil organic matter. The advantages of strip-till include optimum placement of fertilizers for plant uptake and improved conditions for seed-to-soil contact at planting. Strip-tillage ahead of corn is recommended for poorly drained, low slope fields.

Cost-Share for No-Till/Strip-Till:\$10/ac up to 500 acres. To be eligible for funding practices are to be applied to a field that previously hasn't been no-tilled or strip-tilled. **Your application needs to be sent in by March 8th, to be prepared for any early field work!**



Interested in signing up for cost-share?

1. Call your local NRCS field office and tell them what you are interested in or what you would like more information about.
2. Fill out an application. NRCS has specific batching deadlines for applications and are ranked and selected while state cost-share is more first come first served.
3. Allow time for any survey, engineering work or seeding plans to be completed. Cover crops and seeding plans for native seedings have a shorter turn around but practices that need engineering can take 6-18 months. So plan ahead!
4. Construction or seeding cannot start until you have been approved for cost-share. It is very important to remember that you will not be eligible for cost-share until board approval.



Pictured Grundy SWCD Commissioner Jim Kadner is showcasing his knee high rye cover crop in the spring before planting.

“A conservationist is one who is humbly aware that with each stroke of the axe he is writing his signature on the face of the land.” -Aldo Leopold

Contact Your Local Field Office for Information About Conservation Practices

Grundy County
319-824-3634 ext. 3

Black Hawk County
319-296-3262 ext. 3

Tama County
641-484-2702 ext. 3

District Conservationist



Courtney Myers



Shaffer Ridgeway



Larry Jones

Conservation Assistant



Denise Freeseaman



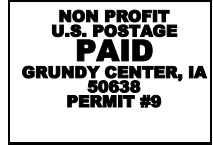
Jenna Curran



Melody Bro

Grundy County Soil & Water Conservation District

Return Service Requested



Black Hawk Creek Watershed

805 West Fourth Street Ste. 2
Grundy Center, Iowa 50638-1069
Phone: (319) 824-3634, ext. 3



The "Partners in Resource Management" newsletter is provided free to owners and operators of land in Grundy County, Iowa, and others interested with issues involving resource management.

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Send questions or comments to:

Grundy County Soil and Water Conservation District
805 West Fourth Street, STE 2
Grundy Center, IA 50638-1069
Phone: (319) 824-3634, ext. 3
Office Hours: 8:00 to 4:30, M-F

Reminder...

Please call the office to make sure someone is available before you come. Since some of the staff is shared with another county or may be in the field, there are times when no one is in the office.

MISSION STATEMENT

The mission of the Grundy County Soil and Water Conservation District is to provide leadership to people regarding technical, educational, and financial assistance that conserves natural resources.

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John Oltman (Vice Chairman)
Don Davidson (Treasurer)
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Denise Freeseaman (Conservation Asst.)
Andy Pothoven (SC)
Heather Kitzman (SC)
Yolanda Butler (SCT)
Faith Luce
(BHC Project Coordinator)

Special Thanks to our Partners!

Black Hawk Creek Water and Soil Coalition
Black Hawk County Conservation Board
Black Hawk County SWCD
Grundy County Conservation Board
Grundy County Board of Supervisors
Grundy County Farm Bureau
Hertz Land Management

Iowa Ag. Water Alliance
Iowa Corn
Iowa Soybean Association
Natural Resources Conservation Service
Practical Farmers of Iowa
Tama County SWCD
The Nature Conservancy

