



# Water Quality Initiative Kicks off in the Boone River Watershed

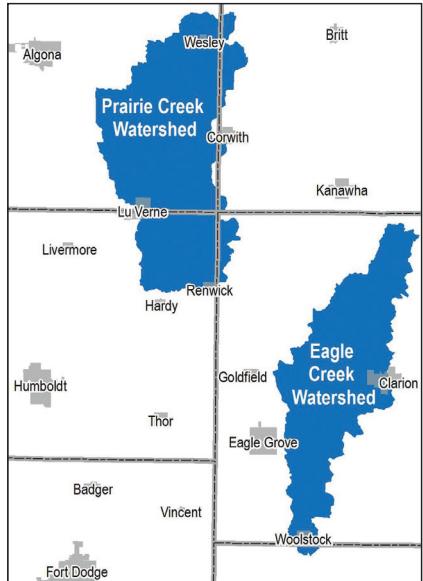
A million-dollar grant has been awarded to the local Soil and Water Conservation Districts (Humboldt, Hancock, Hamilton, Kossuth and Wright counties) to implement the Iowa Nutrient Management Strategy over the next three years in two sub-watersheds of the Boone River, Prairie Creek and Eagle Creek Watersheds. The grant will provide cost-share funding for producers to try out conservation practices, such as cover crops or strip till, that will improve water quality and soil health.

### GOALS TO INSTALL:

- 12,000 acres of cover crops (\$35/acre)
- 1,500 acres of strip-till/no-till (\$18/acre)
- 600 acres of nitrification inhibitors (\$3/acre)
- 1 Conservation Reserve Enhancement Program (CREP) wetland
- 3 bioreactors
- 1 drainage water management plan
- 60+ replicated strip trials demonstrating 4R nutrient management practices (free)

An important part of this grant will be measuring the impacts these conservation practices have on water quality, nutrient uptake and yield. The Iowa Soybean Association will evaluate the success of these practices through edge-of-field and in-stream water monitoring, design and analysis of replicated strip trials and fall nitrate stalk testing.

Watch for local field days and workshops over the next three years, which will tour the watershed as conservation practices are implemented and highlight their benefits.



MAP OF PRIORITY WATERSHEDS,  
PRAIRIE CREEK AND EAGLE CREEK, FOR  
WATER QUALITY INITIATIVE FUNDING.  
MAP BY ADAM KIEL

### For more information on this project,

cost-share rates or conservation practices, please contact Bruce Voigts (Eagle Creek Watershed) at 515-532-2165 x3 or [bruce.voigts@ia.nacdnet.net](mailto:bruce.voigts@ia.nacdnet.net) or Emily Funk (Prairie Creek Watershed) at 515-295-5156 x119 or [emily.funk@ia.nacdnet.net](mailto:emily.funk@ia.nacdnet.net).

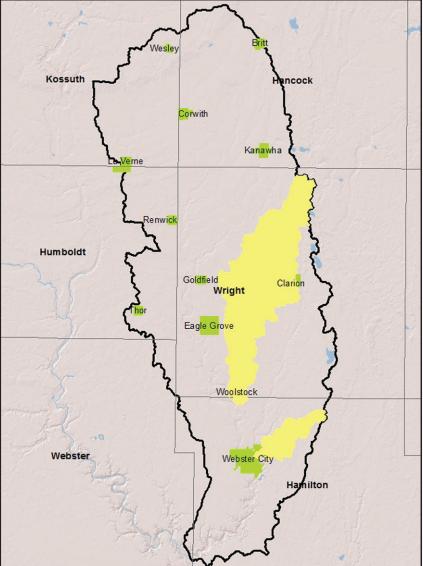
# Collaborating with John Deere for Increased Conservation

As farmers set up production to feed the world's growing population, it's important they continue to adopt additional conservation practices. That's why Boone River Watershed project partners and John Deere are encouraging farmers to intensify conservation practices to improve the quality of soil and water in our state.

John Deere has generously contributed substantial funds and equipment to reach a vital network of producers and expand conservation in Iowa. The Nature Conservancy in Iowa, John Deere Company, Van Wall Equipment in Story City, Iowa, and Woolstock Equipment in Woolstock, Iowa, are working to help farmers better understand how John Deere equipment can be used to implement conservation practices. By using an innovative combination of agricultural methods, farmers can improve soil resiliency and water quality while reducing erosion and nutrient loss.

Over the next year, John Deere will be offering free trial use of

their 2510L Nutrient Applicator, 2510S Nutrient Applicator (strip tillage) and 2623VT Vertical Tillage toolbars to a few producers in Eagle Creek and Lyons Creek Watersheds who are interested in trying these conservation practices. John Deere will also be demonstrating this equipment at local field days this summer and fall. Replicated strip trials and soil sampling will be available to producers through John Deere's funding, which will help measure the benefits of these conservation practices.



MAP OF PRIORITY WATERSHEDS,  
EAGLE CREEK AND LYON'S CREEK,  
FOR JOHN DEERE OFFER.  
MAP BY ADAM KIEL



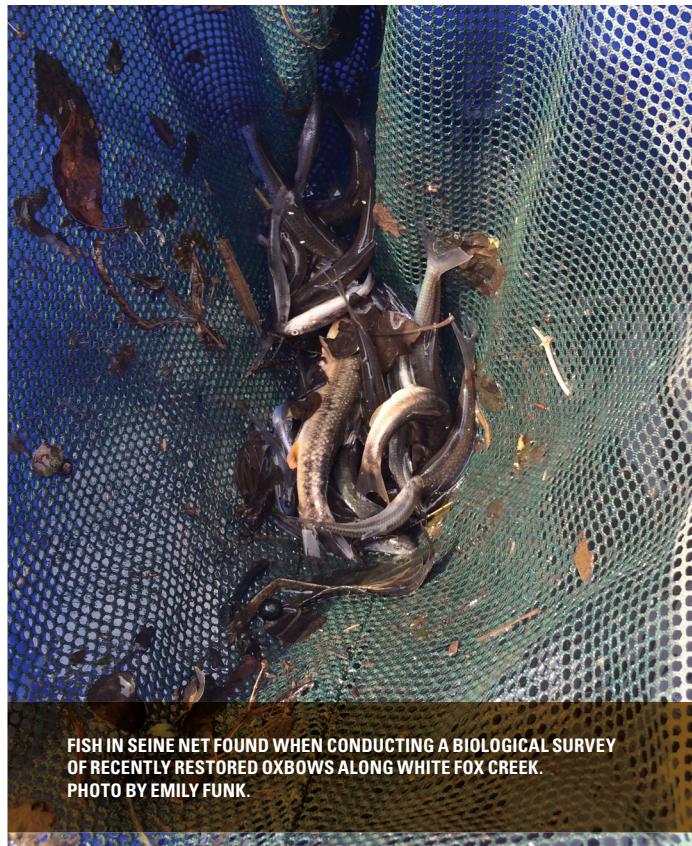
# OXBOW Update

All five of the restored oxbows along White Fox Creek were surveyed this spring for fish. The surveys showed us that despite the severe drought of last fall, followed by one of the coldest and driest winters, most of these restored oxbows held enough water to sustain hundreds of fish. Brassy minnows, bigmouth buffalos, common shiners and bigmouth shiners were the most common fish found in sampled oxbows. Further monitoring will be conducted on restored oxbows to better understand the full suite of benefits they provide, including wildlife habitat, nutrient processing and floodwater storage.

Do you have an oxbow on your property you are interested in restoring? Cost-share funding is now available through the Natural Resources Conservation Service's Environmental Quality Incentives Program (EQIP). There is also funding through the National Fish and Wildlife Foundation, Coca-Cola Foundation and the Environmental Protection Agency to restore five oxbows in the Boone River Watershed.

## For more information,

contact Emily Funk at 515-295-5156 x119 or [emily.funk@ia.nacdnet.net](mailto:emily.funk@ia.nacdnet.net) or  
Karen Wilke at 515-832-2916 x112 or [kwilke@tnc.org](mailto:kwilke@tnc.org).



FISH IN SEINE NET FOUND WHEN CONDUCTING A BIOLOGICAL SURVEY OF RECENTLY RESTORED OXBOWS ALONG WHITE FOX CREEK.  
PHOTO BY EMILY FUNK.

“Despite the severe drought of last fall...most of these restored oxbows held enough water to sustain hundreds of fish.”



FISHERIES BIOLOGISTS FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES SURVEY LOCALLY RESTORED OXBOWS FOR FISH.  
PHOTO BY EMILY FUNK.



A FIELD OF WINTER RYE COVER CROP IN THE BOONE RIVER WATERSHED. PHOTO BY BRUCE VOIGTS.

Droughts, floods, extreme heat and sub-zero temperatures are words we hear with increasing frequency. Given the trend of more extreme weather over the past few years, many producers are turning to cover crops for protection.

Cover crops, such as cereal rye, reduce soil erosion, improve water quality, increase organic matter, capture and recycle nutrients and manage soil moisture. During times of flooding, cover crops can help dry out soil by taking up excess moisture to be used by the cover crop plant. The residue from cover crops will prevent soil erosion and gully formation during high rainfall events, keeping soil in the field where it belongs. During droughts, deep-rooted cover crops aerate the soil, allowing valuable rains to enter the soil profile to be taken up by plants. These deep roots also prevent sheet runoff of rainwater by creating pore space in the soil, allowing water in and making it more

readily available for plant uptake. The cover provided by cover crops insulates the soil from excess heat, preventing evaporation of much needed moisture from the soil.

#### For more information,

contact Karen Wilke at 515-832-2916 x112 or [kwilke@tnc.org](mailto:kwilke@tnc.org).

## FIELD DAYS

Boone River Watershed partners will host several field days in the watershed to showcase agricultural conservation practices, demonstrate conservation equipment – such as strip tillage implements and split nitrogen applicators – and discuss the benefits of cost-share opportunities for these practices.

#### Please follow us

on Facebook at Boone River Watershed or Twitter at @BooneRiver to learn more.



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# The Boone River **REVIEW**