

BEAR CREEK

watershed project



Landowners and residents are working together with the Bear Creek Watershed Project to improve their creek.

By installing conservation practices and making other changes, Bear Creek residents are working to improve their farming operations, their land, their creek and the future.

WHAT'S THE PROBLEM?

Bear Creek is a trout angler's paradise. Fishermen hoping to have the experience of having a trout snag their bait don't have to think twice about heading to the creek located in northeastern Iowa. In order to maintain high quality water in the creek and to keep the trout reproducing naturally, visitors and landowners must understand the creek's history and where it's headed.

Floodwaters have ravaged Bear Creek historically, resulting in damaged croplands, pastures, public roads, bridges and recreational facilities. The high waters also have a negative impact on the wildlife that inhabit the area, specifically the fish. Keeping sediment out of Bear Creek is key to

creating an environment where trout eggs can thrive. If excess sediment washes into the creek and covers the nest, it can cut off oxygen to the eggs, killing them. Thus, cleaner water can lead to improved fishing, which also attracts visitors to the area.

Nutrients also threaten water quality at Bear Creek, located in Allamakee and Winneshiek Counties. High nutrient levels can lead to poor water quality and cloud the water. It can also create low oxygen and high ammonia levels, which are harmful to fish and other aquatic life and lead to potentially toxic algae blooms, as well as a variety of other problems.

Basic Facts

LOCATION

- County: Allamakee, Winneshiek
- Nearby communities: Hesper, Highlandville

ABOUT THE CREEK

- Listed on Iowa's impaired waters list
- Recreational uses: trout fishing

ABOUT THE WATERSHED

- Watershed size: 34,990 acres
- Land use:
 - Cropland: 52%
 - Pasture/Grassland: 36%
 - Forest: 9%
 - Roads/Urban/Farmsteads: 3%

Meet the project coordinator

Marc Oyloe grew up on a farm south of Decorah, Iowa before graduating from Luther College in 1977. Oyloe was hired as project coordinator in May 2000.

"What I really enjoy about my job is doing something to protect our natural resources for the generations to come," said Oyloe. "It's a very rewarding job."

clean water
starts with you.
IOWA DNR WATERSHED IMPROVEMENT

WHAT'S BEING DONE TO HELP?

Marc Oyloe, watershed project coordinator, can work with you to evaluate your property and identify practices that can help both the creek and your property. Oyloe can also help find financial assistance to install those practices. Landowners participating in the watershed project can generally get improved financial assistance opportunities.

The Bear Creek Watershed Project began in February 1999 and continues to add a number conservation practices, including grade stabilization structures, animal waste management systems, pasture management, streambank stabilization, terraces and woodland management.

The goal of the project is to reduce damage in the watershed from floodwater and sediment, to maintain high quality water in the trout streams and to improve recreational opportunities in the area. One of the main ways the project is reaching these goals is through the use of floodwater retaining structures. So far, 11 have been installed with hopes of having 52 total in another 10 years. These structures will control runoff from 42 percent of the watershed and will help protect against damage from flooding, sediment and turbidity (cloudy water) damages.

Grade stabilization structures are installed in the Bear Creek watershed to control run-off and trap sediment, much like a floodwater retarding structure, only on a smaller scale.

Another beneficial practice used in the watershed is animal waste management systems. These systems are used to control runoff from feedlot operations. Animal waste management systems can be effective if they are properly designed and maintained.

The Bear Creek Watershed Project is also promoting pasture management. This conservation method relies on landowners to properly utilize their pastures. If a pasture is well maintained, it will improve the quality of land and reduce runoff.

Streambank stabilization is another practice that has been done in the Bear Creek watershed. Eroding streambanks are shaped and armoured with rock rip rap to provide stabilization. In certain

instances, fish habitat is installed in conjunction with this practice.

Terraces are efficient in reducing soil erosion and sediment in the 34,900-acre watershed. Terraces shorten the length of a hillside by intercepting runoff and taking it to a stable outlet in a non-erosive manner. Terraces must be properly designed and maintained to combat erosion.

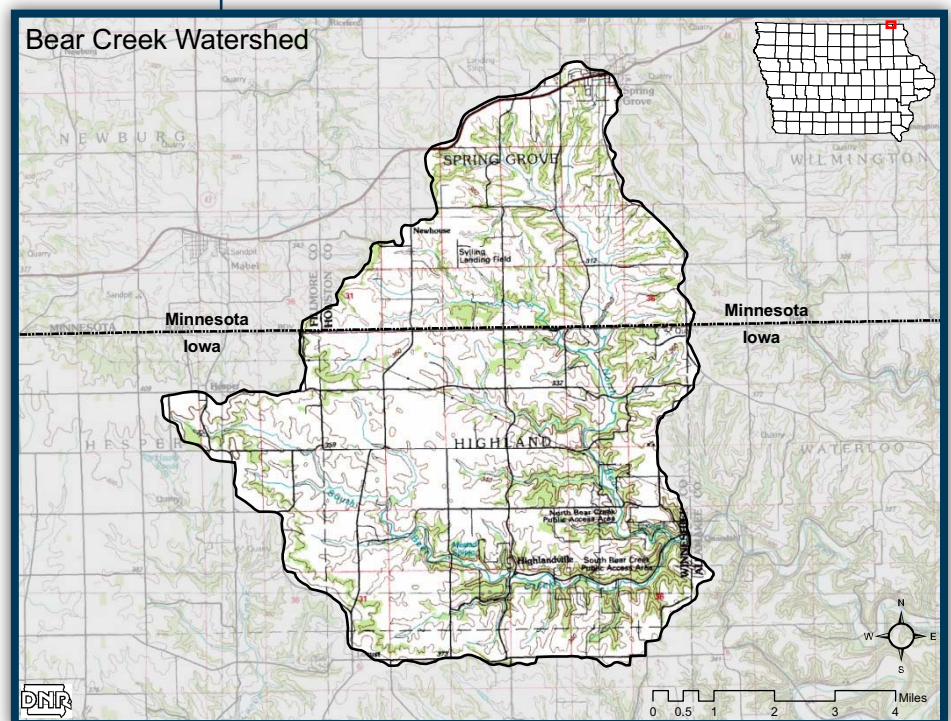
Woodland management is another beneficial practice that is promoted in the Bear Creek watershed. A well-managed woodland reduces soil erosion while providing excellent wildlife habitat.

WHAT CAN I DO TO HELP?

Landowners can consider installing conservation practices to control the amount of sediment, nutrients and other pollutants reaching Bear Creek.

Financial assistance is available, and the benefits extend beyond cleaner water - often conservation practices can produce financial benefits, create recreational opportunities and provide habitat for wildlife.

Residents of Bear Creek can volunteer as part of IOWATER. Monitors collect information on the levels of nitrates, nitrites, dissolved oxygen, pH, chloride and phosphate in creeks, streams and the lake. Monitors also report on the water's temperature and color, and on biological life in the monitoring area, which is often an indicator of water quality.



Monitors report their data to the IOWATER online database, where the public can view water monitoring results from across the state at IOWATER.

WHAT IS THE FUTURE OF BEAR CREEK?

To continue the tradition of superb fishing at Bear Creek, water quality must be protected and improved. Improved water quality will not only contribute to increased natural reproduction of trout in the Bear Creeks, but will also serve as a popular destination for those who seek adventure in northeast Iowa.

“The future looks bright,” said Marc Oyloe, project coordinator. “We are working very hard and results are attainable. We hope to see more natural reproduction of trout in the creek as it is a popular place to fish.”

FUNDING OPPORTUNITIES

The Bear Creek Watershed Project has a number of funding opportunities for local citizens. Two primary sources for land treatment funds are the PL83-566 Small Watershed Program and the Iowa Watershed Protection Program.

- **PL83-566 Small Watershed Program**

The PL83-566 upland treatment funds are used throughout the Bear Creek watershed. They are targeted to high priority areas in the watershed for livestock manure management systems, pasture management, woodland management and terracing. The cost share is 65 percent of the average cost.

- **The Watershed Protection Fund**

The Iowa Watershed Protection Program provides 75 percent cost sharing on certain upland treatment practices.

Other programs available for land treatment assistance in the Bear Creek watershed include CRP, EQIP and WHIP.

PROJECT PARTNERS

- Iowa DNR
- Iowa Department of Agriculture - Division of Soil Conservation
- USDA Natural Resources Conservation Service

SUCCESS STORY



One of the many successes in the Bear Creek watershed includes the recent completion of a floodwater retarding/sediment retention structure on the Harold Stoen property. This is one of 11 structures built in the watershed to date. Before one of these structures can be built, the watershed above them

must be treated to provide as low fifty year sediment accumulation as possible. The Stoen's operation is a first-rate example of good upland treatment.

Harold and Celia Stoen, along with their son Ed, began their operation back in 1963 and were recipients of Winneshiek County's Conservation Farm in 2004. Their operation is a diversified one, with 60 percent of acres cropped, 30 percent in pastures and 10 percent in managed woodland.

Conservation tillage is also performed on all fields following corn production. Harold started building terraces in 1971 and today more than 60 percent of the cropland acres are protected with terraces. Another 10 percent of the cropland is protected with contour strips.

In addition to row crops, the Stoen's run a 45-cow dairy operation. To better utilize the fertilizer value of the dairy manure, while also controlling the pollution potential from manure washed off site, a solids settling basin is used on the dairy lot.

Along with the dairy operation, the Stoen's also maintain a 60-head beef operation utilizing their pasture land. Harold recently fenced off 40 acres of woodland to protect from grazing, and has been doing some culling and interseeding to further improve the timber stand.

The floodwater retarding/sediment retention structure recently completed on the Stoen's property is one of 52 planned structures in the Bear Creek Watershed Project. The Stoen's are strong supporters of the Bear Creek Watershed Project. If all landowners were such good stewards, the Bear Creek Watershed Project would be success.

CONTACT INFORMATION

Local Project Coordinator

Marc Oyloe
(563) 382-4382
Marc.Oyloe@ia.usda.gov
Winneshiek County NRCS Office

Basin Coordinator

Jeff Tisl
(563) 422-6201
Jeff.Tisl@iowaagriculture.gov

DNR Watershed Improvement

Grants Coordinator
Steve Hopkins
(515) 281-6402
Stephen.Hopkins@
dnr.iowa.gov

