

# WHITE OAK LAKE

## watershed project



Landowners and residents are working together with the White Oak Lake Watershed Project to improve their lake.

By installing conservation practices and making other changes, White Oak Lake residents are working to improve their farming operations, their land, their lake and the future.

### WHAT'S THE PROBLEM?

Only 20 acres in size, White Oak Lake and its water quality is slowly diminishing. The major problem that White Oak Lake faces is excessive gully erosion in poorly managed timber areas and pastures.

Excess sediment can reduce water clarity, damage habitat of aquatic life, fill in streambeds, clog drainageways and deliver phosphorous to the lake.

### WHAT'S BEING DONE TO HELP?

The White Oak Lake Watershed Project has a number of conservation practices for farming and country living. Landowners in the White Oak Lake watershed can improve the lake by partnering with the White Oak Lake Watershed Project.

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

The White Oak Lake Watershed Project began in 2006 and may be completed in 2008. The goal is reachable as a number of conservation practices, such as grade stabilization structures, terraces and grassed waterways, are located throughout the watershed to counter excess sediment reaching White Oak Lake.

## Basic Facts

### LOCATION

- County: Mahaska
- Nearby communities: Rose Hill

### ABOUT THE LAKE

- Lake size: 20 acres
- Lake depth: max: 17 ft.
- Year Completed: 1983
- Recreational uses: fishing, picnic areas, trails

### ABOUT THE WATERSHED

- Watershed size: 600 acres
- Watershed to lake ratio: 30:1
- Land use:
  - Corn/Bean: 28%
  - CRP: 20%
  - Parkland: 15%
  - Timber: 12%
  - Pasture: 12%
  - Grassland: 4%
  - Lake: 3%
  - Roads: 4%
  - Farmsteads: 2%

clean water  
*starts with you.*  
IOWA DNR WATERSHED IMPROVEMENT

Grade stabilization structures reduce water flow and slow erosion by being built across a grass waterway or other gullies.

Terraces are an efficient practice in reducing soil erosion and sediment in the 600-acre watershed. Terraces are built around a hillside and either slow runoff and guide it to the bottom of the hill or collect runoff and store it until the runoff can be absorbed by the ground. Terraces must be properly designed and maintained to combat erosion.

Grassed waterways in the White Oak Lake watershed are an effective practice in reducing soil erosion. These natural or constructed channels move surface water across the land without causing soil erosion. The vegetation in the waterway slows the water, protecting the land from rill and gully erosion.

### WHAT CAN I DO TO HELP?

Residents of White Oak Lake watershed can volunteer as part of IOWATER. Monitors collect information on the levels of nitrates, nitrites, dissolved oxygen, pH, chloride and phosphate in the lake.

Some 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 WHITE OAK LAKE?

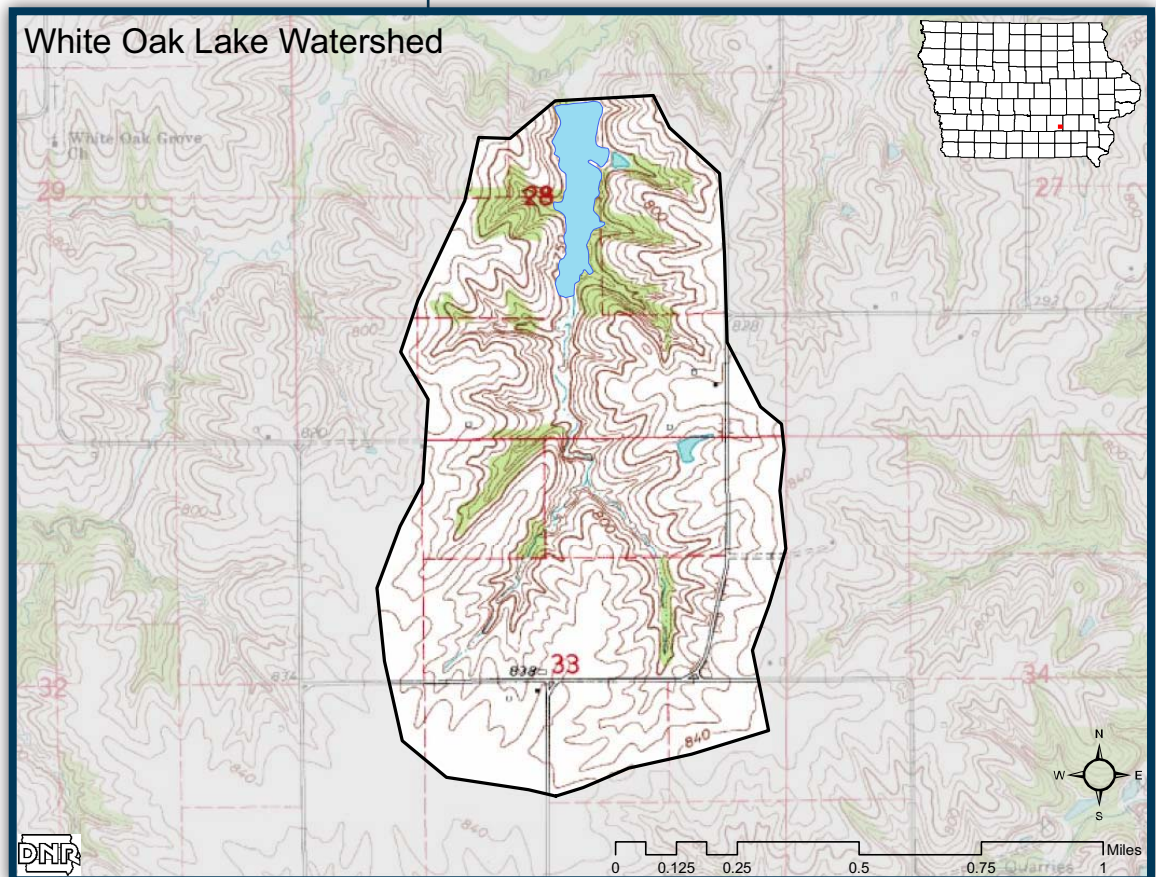
"I think the future of White Oak Lake can be very bright," said Dan Sorem, project coordinator. "If we continue to work together and there is a continued interest, the White Oak Lake watershed can be very successful."

### PROJECT PARTNERS

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

### MEET THE PROJECT COORDINATOR

Dan Sorem grew up in Garwin, Iowa and attended Iowa State University and majored in agronomy. Graduating in 2005, Sorem began work with soil and natural habitats, soon becoming the Mariposa Lake Project Coordinator in nearby Jasper County. Sorem enjoys the ability to get outdoors and to work with the local farmers that are looking to improve the watershed.



### CONTACT INFORMATION

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