

Potential and restored oxbows

28 oxbows have been restored in the Boone River Watershed. Over 160 potential oxbow restoration sites have been identified, however potential oxbows exist in locations beyond those highlighted on this map. There is funding to restore more oxbows in the Boone River Watershed at 100% cost.

- The Nature Conservancy
- Soil and Water Conservation Districts
- Iowa Soybean Association
- Iowa Department of Natural Resources
- Iowa Geological Survey
- Natural Resources Conservation Service
- U.S. Fish and Wildlife Service
- Fishers and Farmers Partnership
- Sand County Foundation
- National Fish and Wildlife Foundation
- Wells Fargo
- Coca-Cola Foundation
- Iowa State University

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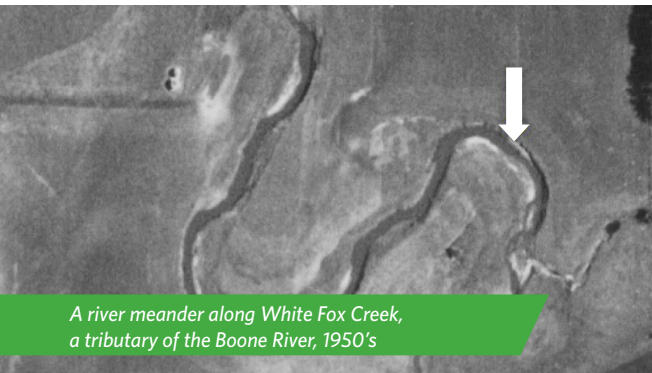
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Boone River Watershed — OXBOW RESTORATION

WHAT IS AN OXBOW?

An oxbow is a meander of a stream that has been cut off from the present flow of water. Over time oxbows may fill in with sediment and lose the benefits they once provided.



A river meander along White Fox Creek, a tributary of the Boone River, 1950's



2008, the meander has been abandoned by the river and the oxbow has silted in.



2013, after the oxbow has been restored.

BENEFITS

- **Improved water quality:**

Oxbows can remove an estimated **45-90% of the nitrates** from intercepted tile water.

- **Floodwater storage:**

Each one acre oxbow provides an estimated **one million gallons of flood water** storage each year.

- **Wildlife habitat:**

Critical habitat for the rare and endangered Topeka shiner minnow.

- **Thousands of fish** representing 40 species of fish have been found utilizing restored oxbow habitat.

- **54 species of birds** have been identified at restored oxbows.

RESTORATION

- Excavate soil to historic riverbed depth
- Re-slope and re-seed banks
- Average surface area size of 1/4 acre
- Typically located in low lying wet areas not currently in production
- Reconnect to river only during floods



Oxbow before restoration



Oxbow during restoration

Oxbow after restoration

