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Black Swamp Conservancy

# Stream Restoration at Little Auglaize Wildlife Reserve

Oakwood, Ohio



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*An H2Ohio-funded design-build effort reconnects a ditched stream to the floodplain and restores 6.53 acres of wetlands, forest, and meadow.*

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## **SERVICES**

Design-build  
Ecological Restoration

**A**s part of its conservation mission, the Black Swamp Conservancy (BSC) focuses on protecting and restoring riparian corridors to improve water quality and wildlife habitat in northwest Ohio. When BSC sought help to manage and implement all aspects of an H2Ohio-funded design-build stream restoration project in the 226-acre Little Auglaize Wildlife Reserve, they turned to Biohabitats.

The project site along the Little Auglaize River includes a mosaic of habitat types, including mature riparian oak-hickory forest, early successional oak-hickory forest, wet meadow, and emergent wetlands. The first 1,000-foot section of a 2,000 ft tributary that flows through the site was previously ditched for agricultural use. The latter 1,000-foot section flows naturally through a more connected floodplain, although localized headcutting destabilized some of the area's streambanks. To address BSC's goals of increasing nutrient uptake, reducing sedimentation and erosion, increasing floodplain connection, and improving habitat, Biohabitats designed, permitted, and implemented a nature-based restoration plan.

Biohabitats converted the initial 1,000 feet of ditch to a stage 0 channel with floodplain benches and stabilized the tributary's lower 1,000 feet using brush wattles to raise the stream invert and increase floodplain connectivity. A series of riffles and pools were also installed immediately upstream of the Stage 0 channel to capture sediment from the upslope farm field. Hummock and hollow grading was incorporated into the floodplain benches and on 3 acres adjacent to the Little Auglaize River. Overall, 6.53 acres of wetlands, forest, and meadow were restored.