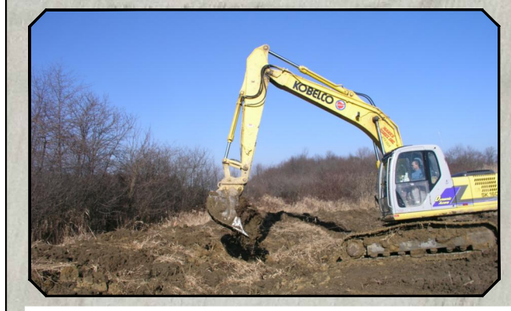
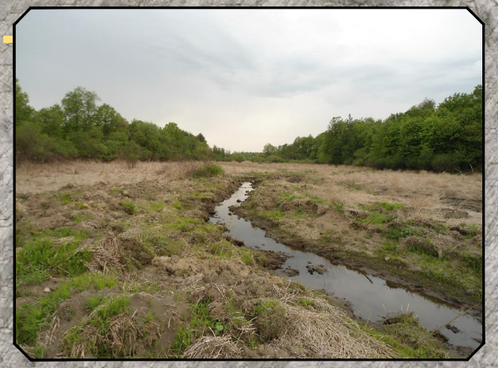
As-Built Map
Year One (2012)

Data collected April 30
and May, 9, 2012



Construction occurred in fallow agricultural fields and involved creating small broad berms to disrupt surface flow and restore site hydrology. In addition to retarding surface water movement, a tile search was conducted to disrupt subsurface drainage of the site.



The previously straight ditch has been restored with meanders and is expected to develop morphological features more typical of other streams found in the Morgan Preserve (top left). The berms and the disrupted drain tile system have restored wetlands hydrology just several months after construction (top right).

A diverse assemblage of bare-root trees and shrubs were installed in the restored wetlands and stream riparian area. Planting started with the installation of 2,100 trees and shrubs by the staff and student volunteers of Kent State University. Planting continued with the addition of another 5,800 plants by volunteers from Fairmount Minerals. A *Quercus bicolor* (Swamp White Oak, left) and a *Platanus occidentalis* (American Sycamore, right) are thriving in the restored wetlands and stream corridor.

Nicodemus Road

Babcock Road

Nicodemus Road

Direction of flow

GRAPHIC SCALE
0 150 300
(IN FEET)

N

Map Legend

- Morgan Preserve (approximately 504 acres)
- Portions of the riparian area dominated by *Phalaris arundinacea* (reed canary grass) that was treated in 2011 (7.5 acres)
- Rock grade control structure created from a stock pile of endemic stone
- Restored stream channel constructed with a flat, low gradient, overwide channel to precipitate self-forming stream process resulting in morphologic characteristics similar to other streams found on the property (1,500 linear feet)
- Berm footprint (2012)
- Areas with restored wetlands hydrology (6.65 acres)

Project Facts

This project was funded by an Ohio EPA Surface Water Improvement Fund Grant. Construction was performed in February, 2012 by Marks Construction. Fairmount Minerals purchased and installed 5,800 native trees and shrubs in April, 2012.

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Prepared for
Portage Park District

Morgan Preserve Wetlands and Stream Restoration Project
Shalersville Township
Portage County, Ohio

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