

Crosswinds Marsh Wetland Interpretive Preserve Methods

Firm Liaisons:

Deb Mitchell Senior Vice President JJR

Kristi Gilbert Marketing Manager JJR

This case study was produced in 2010 as part of the Landscape Architecture Foundation's Landscape Performance Series pilot. LAF staff worked with representatives of firms to document the project and its environmental, social, and economic benefits.

To cite:

Landscape Architecture Foundation. "Crosswinds Marsh Wetland Interpretive Preserve Methods." *Landscape Performance Series*. Landscape Architecture Foundation, 2010. https://doi.org/10.31353/cs1401

The full case study can be found at: https://landscapeperformance.org/case-study-briefs/crosswinds-marsh-preserve

Crosswinds Marsh Wetlands Interpretive Preserve – New Boston, MI Methodology for Landscape Performance Benefits

Environmental

Decreased upstream and downstream flooding.

As a requirement of state regulations, a hydrologic and hydraulic analysis was completed to model the effect of proposed drain relocation and impounded water surface area. This analysis was completed utilizing standard USDA and U.S. Army Corps of Engineers modeling software.

 Restored over 100 acres of historical wetland habitat that had been drained for agriculture and residential use.

As part of the development of the wetland mitigation plan, JJR researched historical data on the site as well as completed a thorough assessment of existing biotic and abiotic conditions. Reference to General Land Office surveys from the mid-1800s provided information on historical conditions of this area. Coordination with the U.S. Department of Agriculture (USDA) provided information on agricultural activities. Combination of this data with the existing conditions analysis allowed us to prepare an estimate of the extent of historical wetland habitat.

 Created a variety of habitat types for over 200 species of birds, 170 species of plants, 20 fish, 30 mammals, 21 reptiles and amphibians, and 70 species of butterflies and dragonflies.

JJR completed five years of post-construction monitoring to document establishment of the various wetland ecosystems as proposed in the approved wetland mitigation plan. Monitoring included observations, measurements and collections of plants, wildlife and aquatic organisms. Additionally, JJR has maintained contact with Wayne County Parks and leads yearly presentations on the project. Through this relationship, we get continuous updates on species lists with emphasis on new, threatened or endangered species observed.

Social

Provides recreational, interpretive, and educational opportunities for more than 15,000 visitors each year while limiting visitor access to sensitive areas.

Wayne County Parks documents visits to the site through standard measures such as vehicle counters placed at the site entrance and logging of all groups requesting participation in interpretive programs.