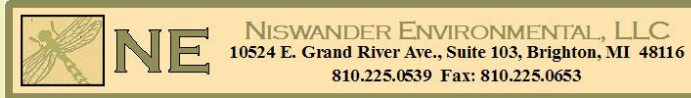


Macatawa Watershed Best Management Practices Demonstration Site



This BMP demonstration site is part of the Macatawa Watershed Project and was funded by a Great Lakes Basin Program Grant as well as generous private donations. The site is a 5-acre wetland system designed to intercept the floodwaters of Noordeloos Creek in order to reduce sediment, and thus phosphorus loading, to Lake Macatawa. Wetlands are highly efficient at sediment removal due to their capacity for water storage coupled with thick vegetation that traps and filters out particles.

Niswander Environmental designed this site to enhance the functions of the existing floodplain wetlands by constructing two separate wetland basins that will increase the frequency of flooding, provide additional storage, and increase vegetative cover. The wetlands were designed at elevations that will accept a minimum of a 2 to 5-year flood event from the Creek. During larger flood events, the wetlands will become part of the active floodplain and will hold the floodwater as the creek level recedes.



The demonstration site will also provide essential wildlife habitat and aesthetics to the stream corridor due to the establishment of native plants as well as wildlife structures within the created wetlands (i.e. root wads, logs, and snags).

Macatawa Watershed

The Michigan Department of Environmental Quality has determined that there is a strong correlation between high water flows and dramatically increased phosphorus loads to Lake Macatawa. This demonstration project will significantly reduce erosion along the streambank, store floodwaters, and reduce sediment and phosphorus contributions to the Lake.



Lake Macatawa

Lake Macatawa is classified by the Michigan Department of Environmental Quality as a "very hypereutrophic" lake. The lake contains excessive nutrient concentrations, experiences frequent nuisance algal blooms, and is considered to have low water quality.

Lake Macatawa is a 1,780 acre drowned river mouth lake near Holland, Michigan. The lake's watershed includes sections of both Ottawa and Allegan counties. Together, the lake and watershed encompass 179 square miles.

