

## **Project Summary**

### **Report of the Hydrologic Condition of the Marengo River Watershed**

The Marengo River is located in central Ashland and Bayfield Counties and is known locally as a river of change. It's not unusual to find sand filling in part of the stream that was a favorite fishing hole the month before. Stream banks become unstable as water rushes through carrying trees and brush, cutting new paths of travel and sometimes even new river channels. The way water circulates on or below the landscape or in the atmosphere – how much, how fast, the source and which path it takes– is known as hydrology. Knowing the hydrology of a watershed is a first step in understanding why sand is filling in the fishing holes or culverts are being washed out. It was the focus of a project sponsored by the Lake Superior Basin Partner Team – *Assessing the Hydrologic Condition of the Marengo River Watershed, Wisconsin*.

#### **Project Idea**

The Wisconsin Lake Superior Basin Partner Team (the Partner Team) was originally formed in 1998 by the Department of Natural Resources, to help implement the Lake Superior Bi-national Program and Area Lakewide Management Plan in Wisconsin. The Partner Team has since evolved into a unique blend of public, private and nonprofit organizations and individuals, whose mission today is to implement a watershed health initiative known as “*slow the flow.*”

The Partner Team selected the Marengo River watershed as its test area to develop and demonstrate a process for assessing the hydrologic condition of Lake Superior watersheds. A step by step guide, including lessons learned from the Marengo River test project, was created for other groups that want to do the same in their own watersheds.

#### **Project Objectives**

The Partner Team wanted specifically to learn which hydrologic factors had the most influence on the timing, quality and quantity of water in the Marengo River watershed. They further wanted to use this analysis to help identify and prioritize projects in the watershed.

#### **Project Results**

The hydrologic assessment identified the following specific concerns or areas of concern in the Marengo River watershed:

- areas with more than 50 or 60% open land or young forest;

- sand deposition in the lower reaches of the watershed and at the confluence with the Bad River, filling in and channelizing flow and restricting access to floodplains;
- cropland tillage, rotation and surface drainage;
- water channeled by road and ditch systems; and
- drained wetlands contributing to the overall volume and velocity of water added to the river system during major runoff events.

In addition, other ongoing projects in the Marengo River watershed have identified the following areas as areas of concern:

- The area within elevations 750 – 1,150 feet above sea level, known as the “Lake Superior clay plain,” is considered an erodible area. This band cuts across the entire Wisconsin portion of the Lake Superior Basin.
- a stretch of the Marengo River located between Kyster Road and County Highway C, has been identified, through a cooperative study by the US Geological Survey and the Bad River Natural Resources Department, as a high risk area for suspended sediment contributions.

## **Future**

This assessment of the Marengo River watershed is only the first step. A newly forming committee is soliciting public involvement to help prepare a watershed management plan using the knowledge gained from this test project. People from the ten communities in the Marengo River watershed will work together to identify and recommend strategies that will slow the flow in the watershed to protect water quality, habitat, and infrastructure for future generations. Contact the Lake Superior Basin Educator at (715)685-2674 for more information or to volunteer to help with next step for the Marengo River watershed.

**THIS PROJECT IS FUNDED BY**  
THE GREAT LAKES COMMISSION / GREAT LAKES PROGRAM FOR SOIL EROSION & SEDIMENT CONTROL,  
ABDI-LAND CONSERVATION COMMITTEES, WISCONSIN DNR, UW EXTENSION, UW SEA GRANT,  
WISCONSIN COMMUNITY ACTION PROGRAM, BAD RIVER NATURAL RESOURCES DEPARTMENT,  
AND THE U.S. FOREST SERVICE

**PROJECT SPONSOR:**  
WISCONSIN LAKE SUPERIOR BASIN PARTNER TEAM

COPIES OF THE *REPORT ON THE HYDROLOGIC CONDITION OF THE MARENGO RIVER WATERSHED*  
ARE AVAILABLE ON THE LAKE SUPERIOR BASIN PARTNER TEAM’S WEBSITE (  
<http://basineducation.uwex.edu/lakesuperior/watershedgmt.htm>).