



# Manistee River

## WHY IS THIS WATERSHED SPECIAL?

The Big Manistee watershed covers 1,780 square miles in northwest lower Michigan, including parts of twelve counties. The river is a popular destination for fishermen who come to pursue game species, including walleye, pike, salmon, and steelhead. However, two major hydroelectric dams divide the watershed, and these operations, along with other smaller dams, prevent species from migrating and spawning. The Little River Band of Ottawa Indians, whose reservation surrounds the watershed, depends on the river for a source of food, recreation, beauty, and sustenance. The river's once-bountiful natural resources represent an important part of their tribal and cultural heritage, which they want to preserve.

## ENVIRONMENTAL CHALLENGES

The Targeted Watersheds Grant will focus on environmental problems due to extensive logging.

- The loss of vegetation has resulted in extreme erosion and excessive sediments that diminish water quality and degrade important habitat and spawning areas.
- Many threatened and endangered species including the lake sturgeon populate the watershed. Historically, the river supported grayling, whitefish, and lake sturgeon, all of which are rare, or in the case of grayling, gone entirely.

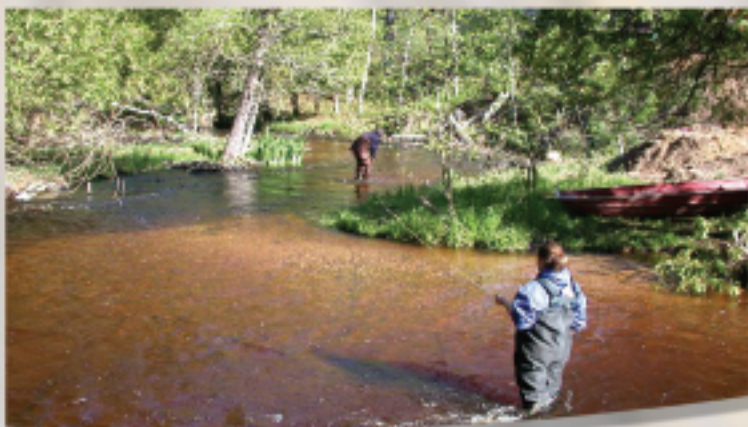
## RESTORATION ACTIVITIES

The Little River Band of Ottawa Indians will look at several innovative approaches to reverse the degradation from years of logging. Long-term goals include the reintroduction of large woody debris, education of landowners, and removal of some of the 63 dams in the watershed. EPA Targeted Watersheds Grant funds will be used to support:

- Road Stream Crossing Projects to address streambank erosion.
- Stream Bank Stabilization Projects in four key stream corridors. Post construction monitoring will include a habitat inventory, substrate classification, macroinvertebrate survey, and a fish assessment.
- An Access Improvement Project. Trails and steps will be built in high traffic areas to minimize erosion from recreational users.
- A Sturgeon Spawning Site Reclamation Project. Boulders, cobble, and large woody debris will be added to produce suitable habitat and channel conditions.
- Outreach activities such as *Celebrate Sturgeon Youth Day* and town hall meetings.

“The EPA funding will help our work with a variety of partners to enhance watershed health. We are currently conducting a comprehensive study of watershed restoration practices. This will be utilized as a tool for others in the future.”

– Lisa Sprague  
Tribal Ogema



Grand Valley State University graduate students marking off a stream reach for sampling.

## A STRONG PARTNERSHIP FOR CHANGE

A number of private and public partners, along with tribal interests, are collaborating to maximize resources and share their expertise in fisheries and watershed management. Partners include:

- Conservation Resource Alliance of Northwest Michigan
- Several counties and townships
- Conservation districts
- U.S. Forest Service
- U.S. Fish and Wildlife Service
- Local Watershed Councils
- Grand Valley State University
- Other restoration partners

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Grand Valley State University graduate student taking macroinvertebrate samples.



Milks Road sampling with local community.



Fishing the upper stretches of Pine Creek.

## EPA'S TARGETED WATERSHEDS GRANT PROGRAM

EPA's Targeted Watersheds Grant Program is a new, competitive grant program designed to encourage collaborative, community-driven approaches to meet clean water goals.

For more information about the selected watersheds, please visit:  
<http://www.epa.gov/owow/watershed/initiative/>



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