

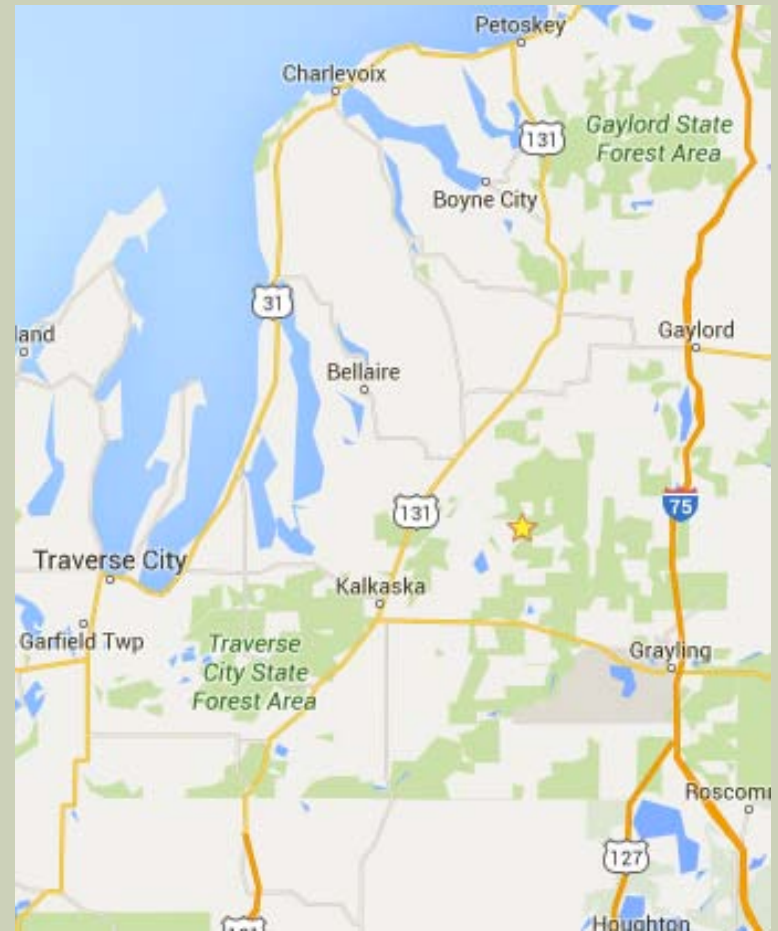
UPPER MANISTEE RIVER VOLUNTEER STREAM MONITORING

Au Sable Institute
of Environmental
Studies 

Paul Wiemerslage
Education Coordinator

AU SABLE INSTITUTE

- Mission: Inspire and educate people to serve protect and restore God's earth.
- College Courses
- Research
- Graduate Fellows
- Environmental Education....



ENVIRONMENTAL EDUCATION

- K-12 Education
- Environmental Education Internship Program
- Community Programs
 - Butterfly Day 5K
 - Native Plant Sale
 - Landowner Best Management Programs
 - Citizen Science
 - Stream Monitoring



MANISTEE RIVER WATERSHED

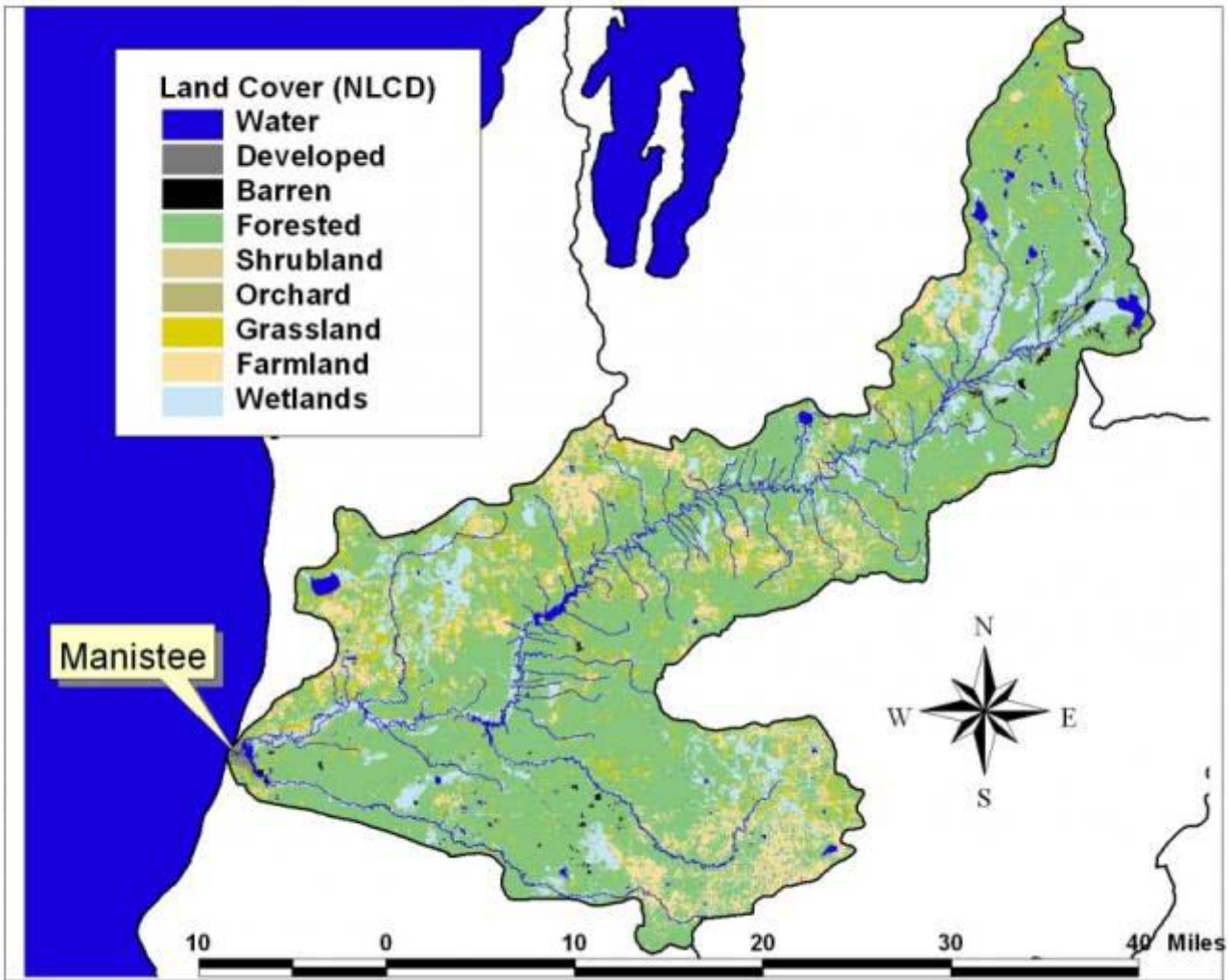
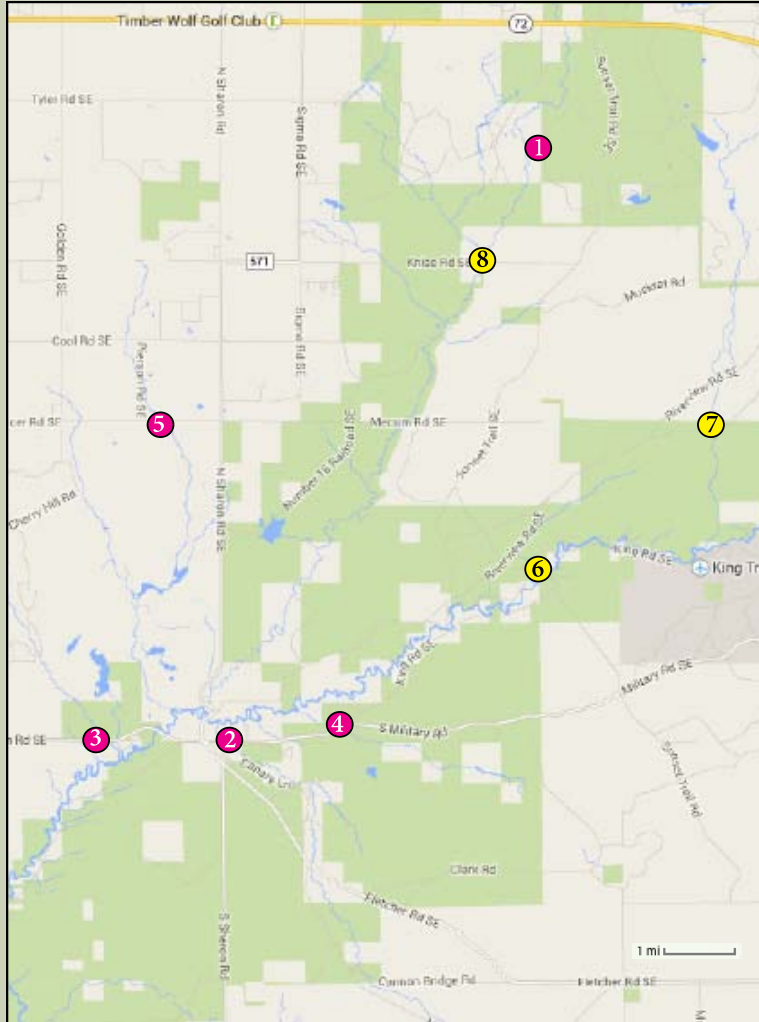


Fig. 1 Upper Mansitee River Watershed Map

UPPER MANISTEE RIVER SAMPLING EFFORTS

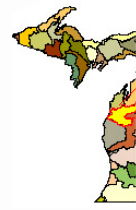
VOLUNTEER STREAM MONITORING PROGRAM (VSMP)



MiCorps Volunteer Stream Monitoring Site Locations - Upper Manistee River -

- Key**
- - Current Monitoring Site
 - - Proposed Future Monitoring Site

- Sites**
- ① - Flowing Water
 - ② - Big Cannon
 - ③ - Maple Creek
 - ④ - Big Devil Creek
 - ⑤ - Pierson Creek
 - ⑥ - Manistee River
 - ⑦ -
 - ⑧ - N. Branch of Big Cannon



GOALS OF THE VSMP

- Educate watershed residents on monitoring, quality, and protection of our water resources
- Engage stakeholder group and individuals through collaborative water monitoring projects and citizen science
- Monitor stream and tributary conditions within the Upper Manistee River Watershed
- Identify or verify problem areas where degradation has occurred and remediation or best management practices can be implemented

PROGRAM OVERVIEW

- Fall and Spring Training and Collection Events
- Habitat Assessment – Fall only
- 5 people per collection team (at least)
- 1 hour collection event (30 minute collection followed by 30 minute sort)
- Keep all bugs, with very, very few exceptions
- Grilled lunch after collection event
- Optional critter Identification event takes place after lunch

PROGRAMMING RESPONSE

- 3rd year of monitoring
- 12 – 20 volunteers each collection event (70% are trained leaders)
- Difficult to engage volunteers in identification events
- Reports posted to website
- Increased our communication and collaboration with Upper Manistee River Association
- Crossover potential with our college courses and research



LESSONS LEARNED:

THE NATURE OF A RURAL AUDIENCE

■ The Good:

- Fewer competing interests
- Media agencies are usually very responsive
- The nature of the resource lends itself to more passionate volunteers per capita
 - Fisherman, landowners, outdoorswomen and men

■ The Less Good:

- Smaller population densities = smaller potential interest
- Greater travel distances for volunteers
- Difficult to “land” your advertisements
- Seasonal residents are typically not present during sampling events.

LESSONS LEARNED: CRITTER IDENTIFICATION

- Everything looks like a mayfly
- People generally like stoneflies
- People generally do not like blackflies or leaches



LESSONS LEARNED: CRITTER IDENTIFICATION

- Identification events are great for creating awe and wonder, not necessarily for lessening your workload.
- Family ID takes time
- Consider seasonal identification practice events



LESSONS LEARNED:

ACCESSIBILITY

- Site selection may be more difficult than you think
- Consider the nature of your audience when choosing sites
 - Volunteers are typically young or retired
 - Many don't have wading experience
 - Comfort and accessibility
- Safety never takes a holiday!



LESSONS LEARNED:

LISTEN TO YOUR VOLUNTEERS

- What supplies would help them be more successful?
 - Eye Droppers for those midges!
 - Tables and chairs.
 - Supplies inventory to help them gather everything before they are done.
- What information would help them feel more confident?
 - Collection protocol reminders
 - Maps, directions, GPS coordinates, and important contact numbers
- Know the limits and capabilities of your volunteers
 - Site accessibility issues
 - Comfort and previous experience in and around moving water
 - Step in and out of vans

MOVING FORWARD

- **Considering a Satellite Approach to collection events**
 - **Alleviate problems associated with:**
 - Length of travel time to samplings sites
 - Scheduling conflicts
 - Weather related issues
 - However, there is potential to lose element of camaraderie associated with event day approach
- **Increased promotions and presentations during the summer to inform and entice seasonal residents to participate.**
- **Explore working more with schools, honors clubs, and AP classes**
- **Increase sampling demand from volunteers**
 - Each group samples 2 sites

CONSIDERATIONS FOR PROGRAM DEVELOPMENT

- Is there a need/Where is the greatest need?
 - Meet with local organizations, state, and government agencies to determine:
 - Interest and support
 - Location of ESAs and identified watershed disturbances
 - Future development plans
 - History of the watershed and conservation efforts/priorities
 - Available resources
- Be realistic about your capacity
 - What resources do you have available?
 - Staff, volunteers, partner support, specialists, supplies, time, etc.
 - How do you plan to sustain the program?
 - Financially, staffing, successional planning

THANKS AND QUESTIONS

Thanks to our partners and volunteers:

MiCorps, MI DEQ, Garfield Township, Conservation Resource Alliance, Blue Lake Township, Upper Manistee River Association

Contact:

Paul Wiemerslage
MiCorps Project Manager
Environmental Education Coordinator
231-587-8686
Paul.w@ausable.org