

Spring 2015 Class



# WATERSHED ACADEMY

## JOIN IN THE SPRING OR FALL



Discover your local watershed and how to protect it.

Learn about aquatic sciences outside of the classroom.

Enjoy hands-on activities.

Make new friends and have FUN!



A program coordinated by  
Tip of the Mitt Watershed Council  
[www.watershedcouncil.org](http://www.watershedcouncil.org)

**Ask your BIO TEACHER  
for an application**

or call the Watrshed Council at (231) 347-1181

# STREAMS & TEAMS

**Team Oden Creek**



**Team Maple River**



**Team Mill Creek**



**Team Five Mile Creek**



**Team Stony Creek**



**Team Boyne River**



**Team Bissell Creek**



**Team Shanty Creek**



**Team Jordan River**



**Legend**

- Roads
- Highways
- Lakes
- Rivers and streams
- Wetlands
- Urban areas
- County boundaries
- Service area boundary

**Watershed Boundaries**

- Carp River
- Cheboygan Bay
- Little Traverse Bay
- Lake Charlevoix
- Elk River
- Coastal/Other Watersheds

**Map Source:**  
Watershed and service area boundaries were developed by the Tip of the Mitten Watershed Council using data from Michigan Geographic Data Library (MGDL) and were map data downloaded from the MGDL.

**MAP MADE BY:**  
Watershed Council  
June 22, 2012

## Program Summary

The Tip of the Mitt Watershed Academy engage 9th and 10th grade students in citizen science efforts and place-based education. Members learn stream water quality monitoring techniques and collect data that contributes to Tip of the Mitt Watershed Council's water quality monitoring efforts. The Watershed Academy provides an opportunity for members to connect with both their communities and local water resources. Academy members participate in meaningful environmental stewardship, gain insight into relevant conservation issues and new career opportunities, as well as share their experience with the greater community.

### Schools involved in the 2015 Spring Semester of the Watershed Academy included:

- Alanson High School
- Boyne City High School
- East Jordan High School
- Harbor Springs High School
- Pellston High School

*Additional schools will be invited to participate this Fall and in 2016.*



**"The Watershed Academy was a great experience!"**

- Hayley T.  
Pellston High School



*2015 Spring Watershed Academy.*

Funding for this program provided in part by:

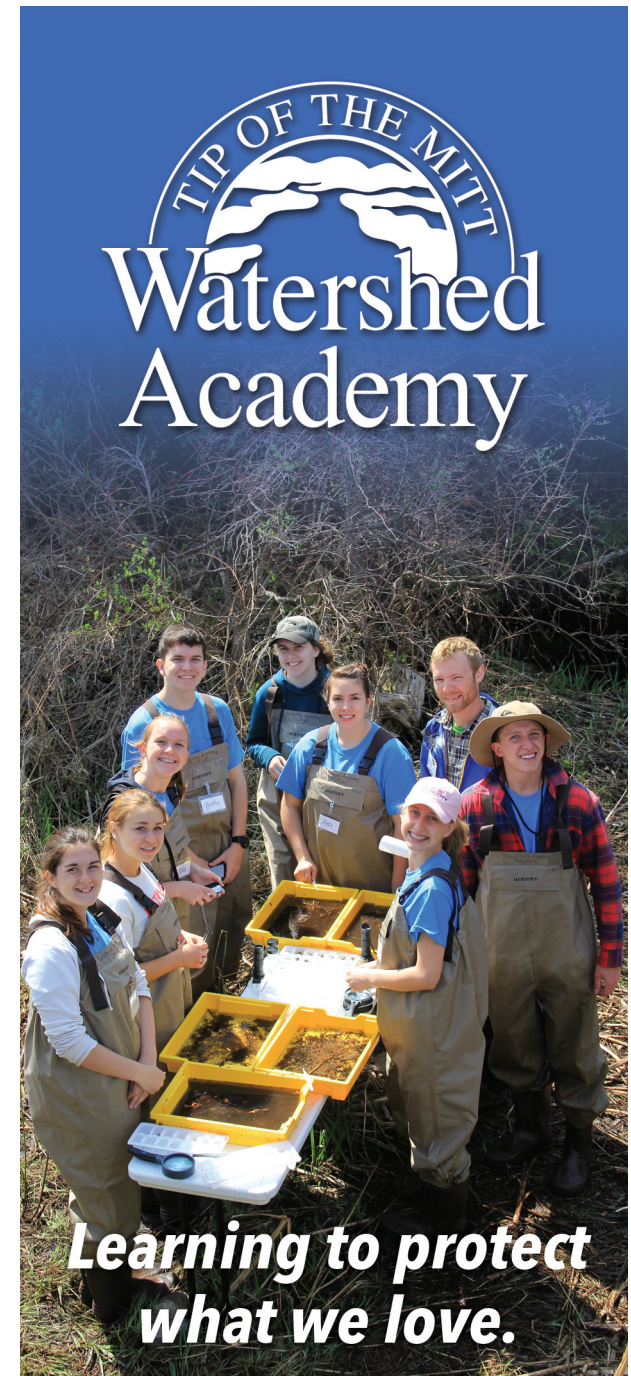


Oleson Foundation



426 Bay Street  
Petoskey, MI 49770  
(231) 347-1181

[www.watershedcouncil.org](http://www.watershedcouncil.org)



**Learning to protect what we love.**

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## SESSIONS

### **Watershed Science:**

Overview of watershed science and an introduction to school-specific watersheds

### **Water Quality Monitoring:**

Water quality monitoring basics and the importance of macroinvertebrate identification and analysis.

### **Field Day:**

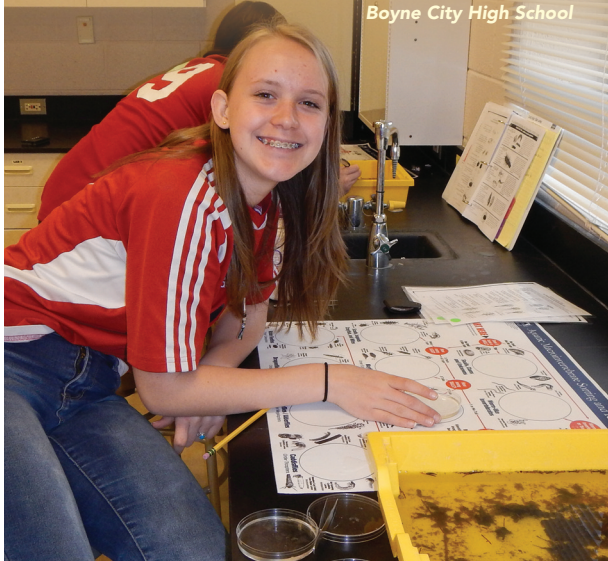
Applied water quality monitoring within a team's watershed.

### **Watershed Academy Summit:**

Watershed Academy Teams assemble to present their watershed projects to fellow Academy members, families, and community members at North Central Michigan College.

*"I learned so much, and had a lot of fun!"*

- Olivia V. from  
Boyne City High School



## DISCOVER HOW YOU CAN GET INVOLVED

Contact Tip of the Mitt Watershed Council  
(231) 347-1181 • [www.watershedcouncil.org](http://www.watershedcouncil.org)

To get a Watershed Academy in your school  
or to help with a field day, contact

Mackenzie Dix • [mackenzie@watershedcouncil.org](mailto:mackenzie@watershedcouncil.org)  
or Maria Affhalter • [maria@watershedcouncil.org](mailto:maria@watershedcouncil.org)

To make a donation to support the program, contact

Gail Gruenwald • [gail@watershedcouncil.org](mailto:gail@watershedcouncil.org)



*"The students loved it, especially the hands-on experience!"*

- Brooke Groff  
Biology teacher, Pellston High school



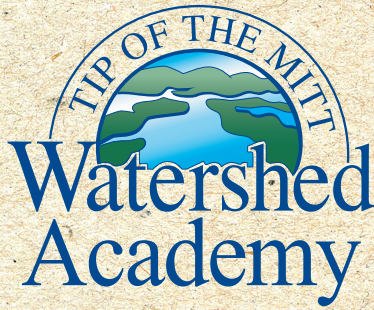
## OUR PARTNERS

The Watershed Academy also engages other local resource partners, including:

- Little Traverse Conservancy
- Little Traverse Bay Bands of Odawa Indians; Odawa Natural Resources Department
- University of Michigan Biological Station
- Friends of the Boyne River
- Friends of the Jordan River

Support for the Academy comes from:

- Petoskey-Harbor Springs Area Community Foundation
- Charlevoix County Community Foundation
- The Frey Foundation
- Little Traverse Conservancy
- Tip of the Mitt Watershed Council
- Great Lakes Fishery Trust
- Oleson Foundation



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The Tip of the Mitt Watershed Academy engages high school biology students in citizen science efforts and place-based education. Academy members learn stream water quality monitoring techniques and collect data that contributes to Tip of the Mitt Watershed Council's water quality monitoring efforts. The Watershed Academy provides an opportunity for members to connect with both their communities and local water resources. Academy members participate in meaningful environmental stewardship, gain insight into relevant conservation issues and new career opportunities, as well as share their experience with the greater community.

### Schools participating in the Watershed Academy included:

- Alanson High School
- Boyne City High School
- Pellston High School
- Elk Rapids High School
- East Jordan High School
- Harbor Springs High School
- Onaway High School

*"The students loved it, especially the hands-on experience!"*

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Biology teacher, Pellston High School*

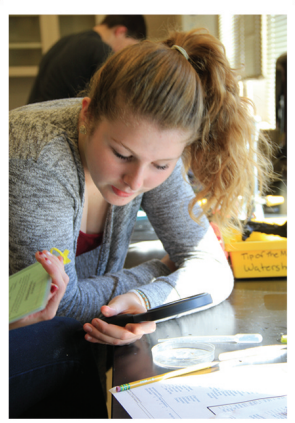
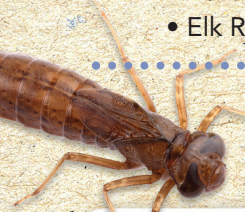
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- University of Michigan Biological Station
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- Friends of the Jordan River

Support for the Watershed Academy comes from:

- Tip of the Mitt Watershed Council
- Little Traverse Conservancy
- Great Lakes Fishery Trust
- AmeriCorps



## Watershed Academy Sessions

### Watershed Science:

Watershed Academy members are introduced to an overview of watershed science and an introduction to school-specific watersheds.

### Water Quality Monitoring:

Members learn water quality monitoring basics and the importance of macroinvertebrate identification and analysis.

### Field Day:

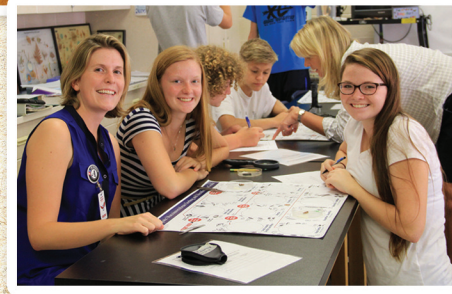
Members apply water quality monitoring within a team's watershed.

### Stream Data and Team Project:

Teams analyze, compare data, and complete projects to share with the public.

### Watershed Academy Summit:

Watershed Academy Teams assemble to present their watershed projects to fellow Academy members, families, and community members at North Central Michigan College.



### For information about the Watershed Academy:

Call Tip of the Mitt Watershed Council at (231) 347-1181 or visit our website at [www.watershedcouncil.org/watershed-academy](http://www.watershedcouncil.org/watershed-academy)

## What are Watershed Academy members saying about the program...

*"By learning that every choice affects our watershed, I've learned to make careful decisions."*

*"I learned so much, and had a lot of fun!"*

**Your support impacts the future of Northern Michigan waters.**



*"It was a great experience!"*

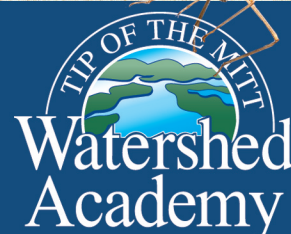
*"I learned how important our watershed is and how important it is to take care of it."*

*"In this program I learned how important it is for water to have a filtering system. Not only are trees important for the air, their roots are important for the water health."*

### To make a donation or help support the Watershed Academy program:

Gail Gruenwald, Executive Director at (231) 347-1181 ext. 103 or email [gail@watershedcouncil.org](mailto:gail@watershedcouncil.org)

Current funding for this program provided by:



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# TIP OF THE MITT Watershed Academy



*"The students loved it,  
especially the hands-on  
experience!"*

- Brooke Groff  
Biology teacher, Pellston High

## Our Partners

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- Little Traverse Conservancy
- Little Traverse Bay Bands of Odawa Indians; Odawa Natural Resources Department
- University of Michigan Biological Station
- Friends of the Boyne River
- Friends of the Jordan River

Support for the Watershed Academy comes from:

- Charlevoix County Community Foundation
- Kroeger-Mainland Family Fund
- Tip of the Mitt Watershed Council

## Watershed Academy Program Summary

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### Schools currently participating in the Watershed Academy:

- Alanson High School
- Boyne City High School
- East Jordan High School
- Harbor Springs High School
- Onaway High School
- Bellaire High School
- Boyne Falls High School
- Elk Rapids High School
- Mackinaw City High School
- Pellston High School

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## Watershed Academy Sessions

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*"I learned how important our watershed is and how important it is to take care of it."*



### For information about the Watershed Academy:

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### To get the Watershed Academy in your school:

**Maria Affhalter,**  
Water Resource Education Director  
[maria@watershedcouncil.org](mailto:maria@watershedcouncil.org)  
(231) 347-1181 ext 116

**Eli Baker,**  
Education and Outreach Specialist  
[eli@watershedcouncil.org](mailto:eli@watershedcouncil.org)  
(231) 347-1181 ext 119

### TO MAKE A DONATION

or help support the Watershed Academy program:

**Gail Gruenwald,**  
Executive Director  
(231) 347-1181 ext 103  
[gail@watershedcouncil.org](mailto:gail@watershedcouncil.org)

Current funding for this program provided in part by:

CHARLEVOIX COUNTY COMMUNITY FOUNDATION



Giving Back. Moving Forward.

KROEGER-MAINLAND FAMILY FUND



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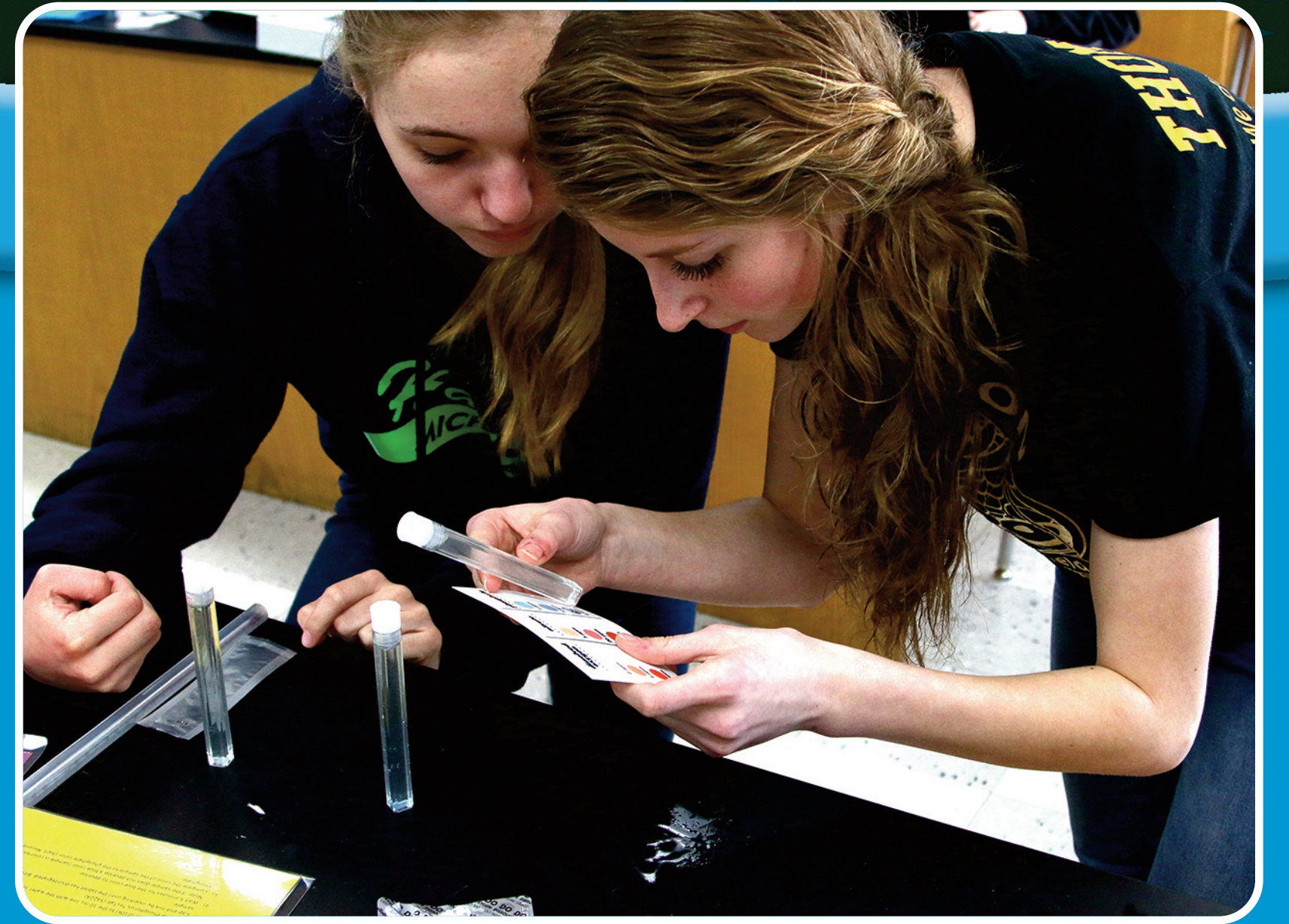
# Learning to protect what we love



Learning  
about...



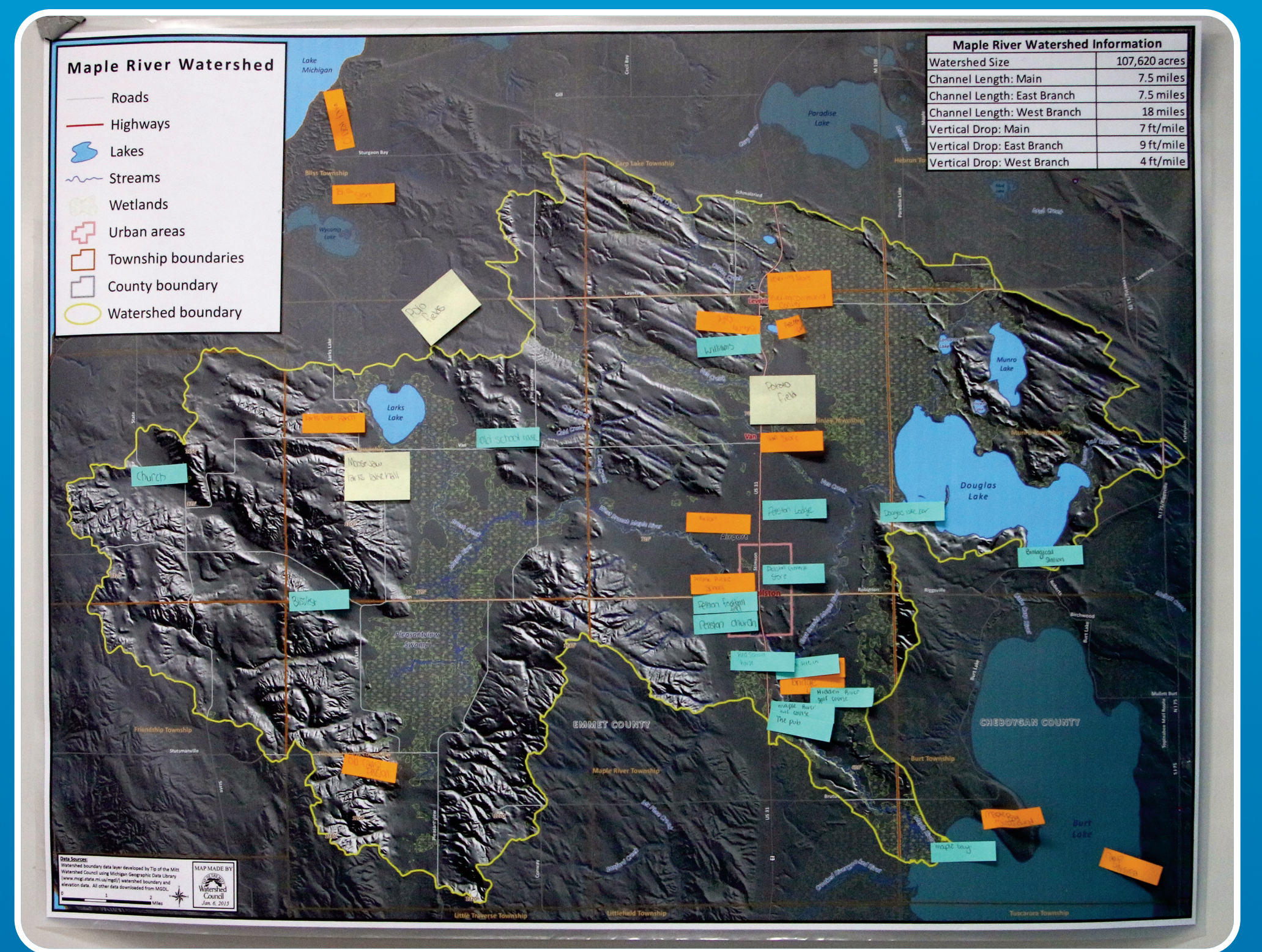
Water Quality Monitoring



Water Chemistry



Field Research



Watersheds



Macroinvertebrates



Teamwork and Stewardship