MiCorps 101

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& MiCorps Staff

MiCorps Team

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Protecting the river since 1965

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MICHIGAN LAKE AND STREAM ASSOCIATIONS

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“Together, we’ll create the nation’s most comprehensive and meaningful clean water monitoring system, building a water legacy for generations to come.”

Governor Jennifer Granholm
2003

Michigan Clean Water Corps

Governor's Executive Order

- MiCorps established September 30, 2003
- Comprehensive statewide volunteer water quality monitoring network
- Pre-existing lake program, a fledging stream program, and pre-existing water cleanup program

Michigan Clean Water Corps

MiCorps Goals

Education

- Local: Educate residents and interested citizens in collection of water quality data, ecology, and management practices.

- State: Build a constituency of citizens to practice sound ecological management at the local level and build public support for water quality protection.

Michigan Clean Water Corps

MiCorps Goals

Data Collection

- Local: Enable collection of standardized baseline information to document trends in water quality for lakes and streams so groups/people can make wise local management decisions.

- State: Provide a cost-effective process for the DEQ to increase baseline data in Michigan.

Michigan Clean Water Corps

MiCorps Goals

Support

- Network monitoring organizations statewide.
- Provide a platform for sharing consistently collected data.

MiCorps Programs

•MiCorps consists of two main programs concentrating on volunteer stream and lake monitoring

•Volunteer Stream Monitoring Program (VSMP)

•Cooperative Lakes Monitoring Program (CLMP)

- Other components of MiCorps that support the 2 main programs are:
  - Grants (Streams only)
  - Trainings
  - Annual Conference
  - Newsletter
  - Email ListServ for news
  - Web site
  - Web-based, publically available, searchable database

Michigan Clean Water Corps

MiCorps concentration in quality assurance gives us…

More reliable data

Which gives us:

- Greater use by the DEQ and local managers in planning and management
- Continued funding of the program.

Michigan Clean Water Corps

Volunteer Stream Monitoring Program (VSMP)

What would a successful volunteer stream monitoring program look like?

- You collect data about your fresh water
- You use it to and the monitoring process to educate and foster stewardship, & get people to independently take action.
- You continually are reaching new people.
- Human impacts to the watershed are alleviated.
- **MiCorps helps you with the first bullet with money, training, and assistance. And gives money to help with recruiting volunteers.**
- **The next three bullets require further dedication and elbow grease that go beyond a MiCorps grant.**

Volunteer Stream Monitoring Program (VSMP)

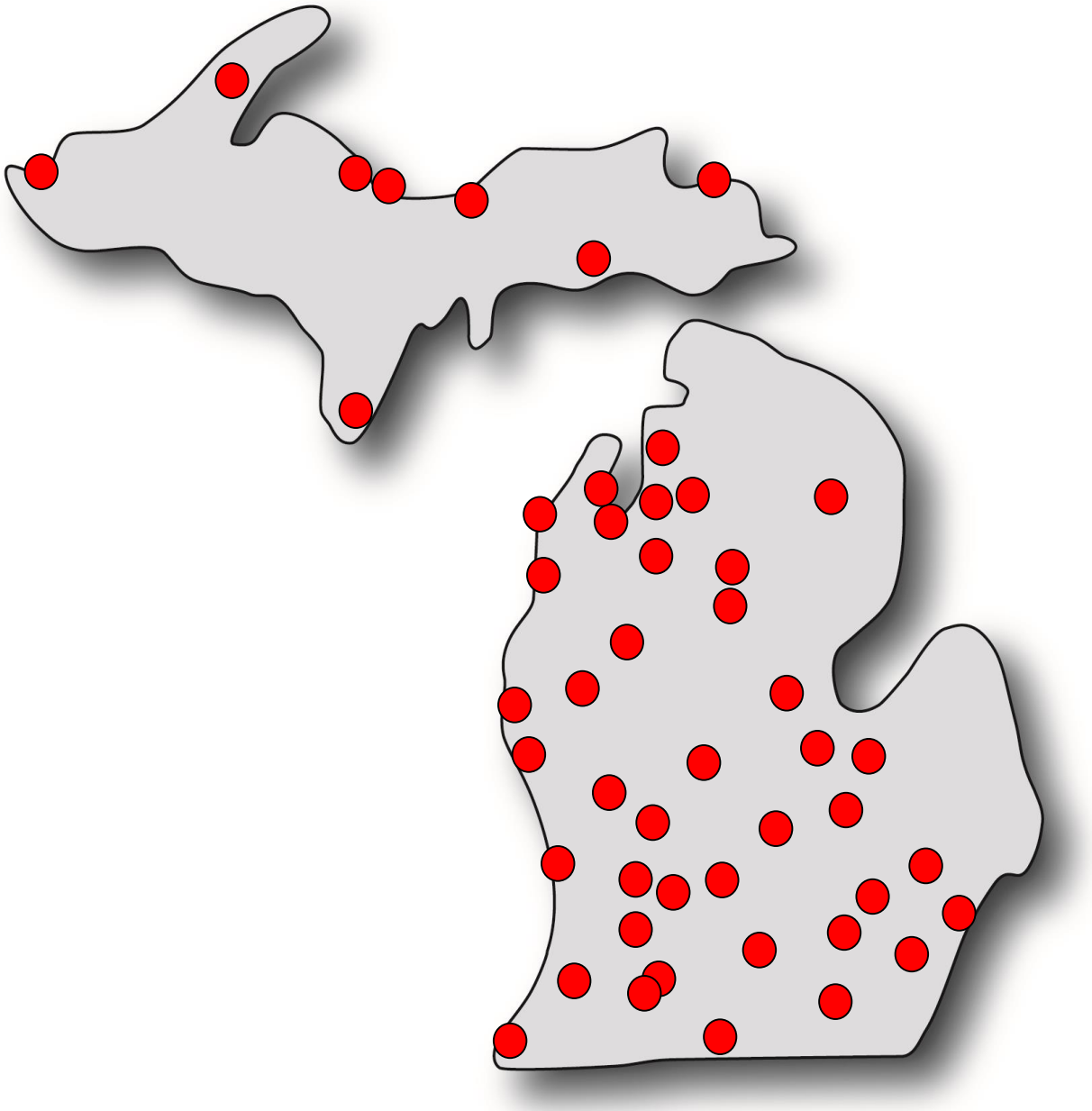
•A grant-based program for local groups to develop or enhance stream monitoring programs. Groups must be non-profits, academic, or local government.

- $50,000 total is available every year, RFP released Jan-Feb.
- Macroinvertebrate full grants last 2 years ($10-15k)
- Macroinvertebrate start-up grants last 1 year.($1-3k)
- R/S Crossing grants last 1 year ($5-10k)

The VSMP annual training day

Michigan Clean Water Corps

Volunteer Stream Monitoring Program



- Since 2005, 45 Groups have received grants.

  Including:
  - Cannon Township
  - Tip of the Mitt Watershed Council
  - Friends of the St. Clair River
  - Muskegon River Watershed Assembly
  - Branch County Conservation District
  - Upper Peninsula Resource Conservation and Development Council

Stream Program Components

Groups who receive grants are expected to:

- Find, engage, train volunteers
- Collect and identify Macroinvertebrates, monitor habitat OR
- Inventory and assess road/stream crossings
- Build Databases (MDE, Volunteer)
- Verify & interpret the data
- Follow up as needed with relevant authorities based on the results of monitoring.

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What support do grantees get from MiCorps?

- Money
- Training, procedures, technical assistance
- A solid reputation
- Plugged into the MiCorps network

Why collect bugs?

Scientifically Useful

- Good indicators of stream conditions
- Diversity = Healthy stream
- A scarcity of bugs may indicate:
  - Sedimentation
  - Habitat loss
  - Chemical pollution
  - Hydrology problems

Great for Volunteers

- Easy sampling techniques- great for volunteers
- Generally abundant communities- volunteers find them quickly.

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Why conduct a Road/Stream Crossing Inventory?

- A new program, piloted in summer 2014.
- Uses a MDNR & MDOT approved methodology.
- Provides important information for planning restoration projects

- Groups develop a prioritization list that is useful for getting additional grants

- Eligible for grant funding

- By 2016- stream flow monitoring, also grant eligible.

Questions on the Volunteer Stream Monitoring Program?

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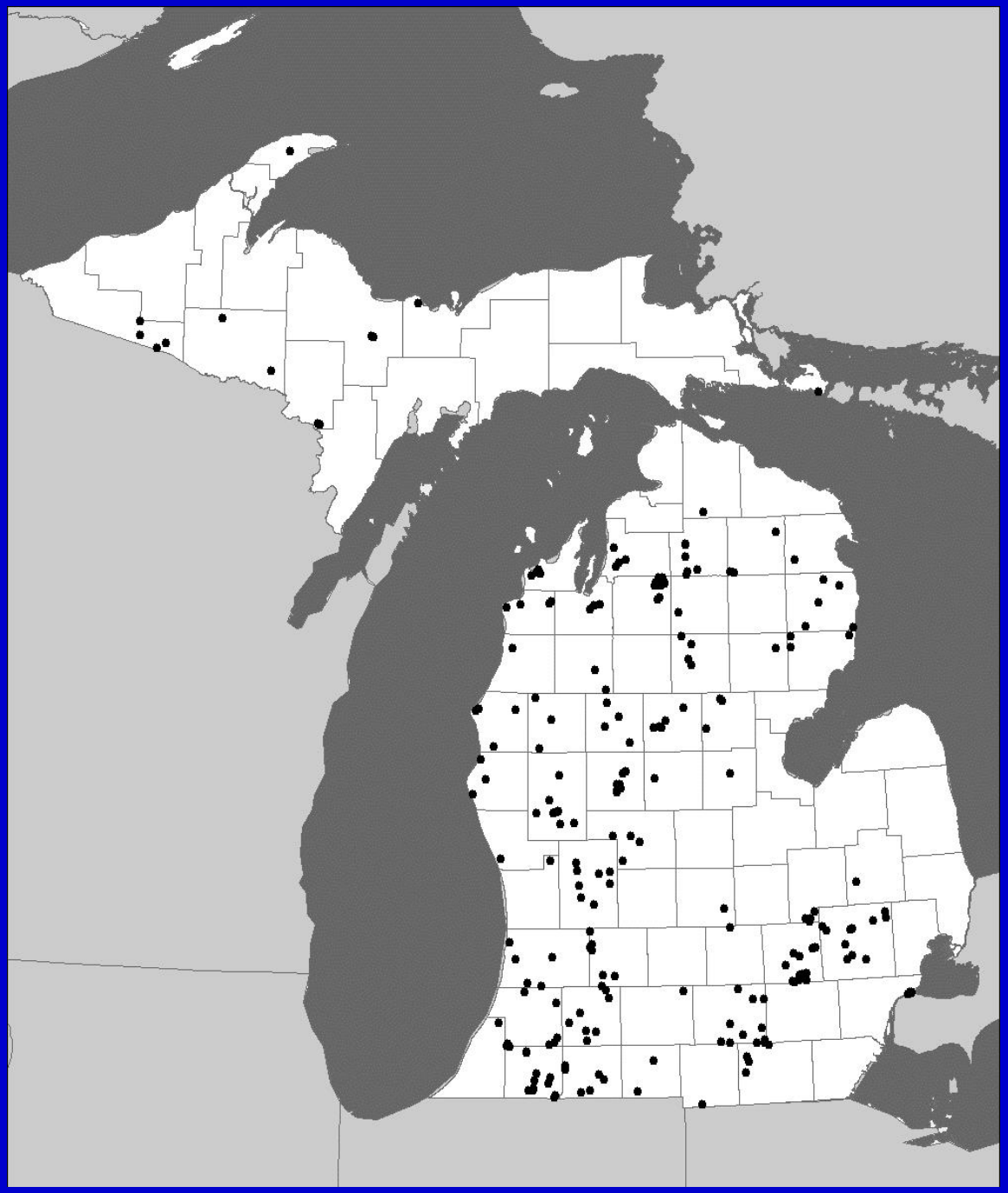
Cooperative Lakes Monitoring Program (CLMP)

Michigan Clean Water Corps



CLMP Membership

2014 number: ~225 Lakes monitored by lake associations or individuals

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What do we measure in the CLMP?

- Transparency
- Total Phosphorus
- Chlorophyll *a*
- Dissolved Oxygen and Temperature
- Aquatic Plants
- Shoreline Habitat Assessment

What is expected of volunteers?

- A slight enrollment fee ($20-60, depending on parameter, plus one time equipment costs… www.micorps.net/lakevolunteer.html for details)
- Weekly or biweekly transparency measurements. Other measurements are taken monthly.
- Attend an annual training
- Follow directions carefully.
- Sample turn in: two-three times during the sampling season volunteers bring their samples into a local DEQ office.

And what does the CLMP provide in return?

- About 90% of the costs of the program are paid for by the State.
- The potential for long term data on your lake (the program has been operating since 1974).
- Training
- Analyzes your water samples at the State of Michigan lab for long-term data consistency
- Excellent quality assurance procedures

What the CLMP does vs. doesn't do

- The CLMP only provides a way for you to collect the baseline data that is needed to make proper management decisions. CLMP staff can answer questions but time is very limited.

- It takes further effort, further resources, and committed riparian owners and state and local governments to carry out these management decisions.

- Additional lake management resources are available on the MiCorps web site at http://www.micorps.net/lakeresources.html

Why study trophic status of a lake?

- Observing long-term trends of the CLMP parameters can help us understand if the amount of algae (lake eutrophication) is increasing in the lake over time.

- High phosphorus, high chlorophyll, and low transparency can be signs of:
  - Undesirable algae blooms
  - Poor boating and swimming
  - Low dissolved oxygen which can cause fish kills

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What do dissolved oxygen and temperature profiles tell us about a lake?

Define the temperature and density zones of lakes.

Thermally classify lakes (warm or cold water)

Determine bottom water oxygen depletion.

Sediment phosphorus release- phosphorus is released from bottom sediments in anoxic (no oxygen) conditions.

Fishery status indicator- what kind of fish can this lake support?

Aquatic Plants- Full Surveys and Exotic Plant Watch

•CLMP offers two versions of plant monitoring.

•The full survey program provides training and technical assistance to map out all of the plants in a lake (native and exotic).

•The Exotic Plant Watch is dedicated to early detection of incoming exotic plants.

Lakeshore Habitat Assessment

•Pilot Project for 2015 (25 lake maximum enrollment)

- To what extent is your lake developed vs. natural?
- Where are problematic erosion areas?
- Learn where to target educational materials or what local ordinances to consider.

Questions on the CLMP?

MiCorps Website and Data Exchange Platform

- www.micorps.net
  - Registry of water monitoring groups
  - Various information on water monitoring (newsletters, equipment lists, procedures, brochures, quality assurances plans).

- Data exchange platform
  - Searchable database of all of the information collected by MiCorps volunteers.

MiCorps Conference and Newsletter

- These items provide a way for MiCorps members to speak to each other and share their news and experiences.
- This is a major part of creating a “network” of monitors across the state.
- Newsletter are electronic and

can be found on our website.

- In 2015, MiCorps will pursuing a social media presence (blog, Facebook, twitter).

Volunteer River, Stream, and Creek Cleanup Program

- $25,000 total is available annually through a competitive grant application process.
- Compared to other grants out there, it is a simple application.
- Began in 1998
- Since 2005, 115 grants totaling nearly $250,000 have been awarded to recipients around the state of Michigan under the VRSCCP.

Contact information

- See MiCorps staff:

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- Web site: www.micorps.net

Questions for MiCorps staff?

MiCorps

Monitoring Michigan's Water Quality