

GRANTEE NAME: Missaukee Conservation District

PROJECT NAME: Upper-Central Muskegon River and Manistee River Watershed Monitoring Program

PROJECT GOALS:

1. Educate citizens of Missaukee County, raising awareness about water quality.
2. Promote stewardship and monitoring of Missaukee County's water resources, focusing on streams in the Manistee and Muskegon River watersheds to establish baseline conditions and monitor changes over time.
3. Using MiCorps VSMP as a springboard, we will encourage water monitoring of lakes in addition to streams.
4. Identify problem areas where degradation has occurred, where best management practices or remediation may be implemented.

PROJECT OBJECTIVES:

1. Project Preparation:
 - Finalize study plan, site locations, and sampling schedule.
 - Develop and submit QAPP to MiCorps Project Manager for approval.
 - Acquire necessary sampling equipment through purchase and/or donation.
 - Attend MiCorps training event.
 - Host training events for project volunteers.
2. Sampling Events:
 - Host event for side by side sampling with MiCorps representative.
 - Collect samples and habitat information in the fall and spring of each project year.
 - Sort, record, and store collected data.
3. Data Management:
 - Analyze collected data during off-season sampling months Project MiCorps.
 - Enter compiled data into the MiCorps Data Exchange network.
 - Update GIS and District website as data is compiled.
4. Outreach & Education:
 - Recruit Project volunteers through newspaper articles and displays/programming.
 - Report project findings regularly through newspaper articles, public meetings, display/programs at county libraries and parks, and through the District websites and Facebook pages.
 - Attend MiCorps Annual Conference and give a presentation at the 2018 conference.
5. Project Management:
 - Prepare and submit quarterly status and financial status report.
 - Submit the final project report, fact sheet, release of claims letter, financial status report, and all project electronic deliverables including GIS apps and website link.

THE EXTENT TO WHICH GOALS & OBJECTIVES WERE MET:

Missaukee Conservation District was able to accomplish each goal and objective listed. The biggest challenges that arose were due to several employee turnovers during the grant period.

CHALLENGES OR OBSTACLES/OVERCOME HOW?/NOT OVERCOME? WHY?:

1. Staff turnover during the grant period occurred several times. With each new staff member, current staff were able to step in and take over to help complete the requirements of the grant in a timely manner.
2. Certain initial sampling sites were deemed inadequate either because of private ownership, water depth, or being inaccessible. New sites were chosen with the help of others having more knowledge of the area streams.
3. Volunteer recruitment & appreciation were an issue in the beginning. A couple smaller grants were denied that were meant for volunteer appreciation.

SUMMARY OF TRAINING/MONITORING EVENTS/NUMBER OF SITES MONITORED/NUMBER OF VOLUNTEERS INVOLVED:

1. Training:

- Side-by-side training event with Paul Steen 8/23/17
- Stream Leader Training 9/28/17
- MiCorps Conference November 2017
- MiCorps Conference October 2018

2. Monitoring Events

- 10/7/17...8 sites...4 volunteers
- 5/19/18...6 sites...11 volunteers
- In addition, the Lake City High School Advanced Biology Class sampled one site & completed ID with 1 professional and 14 students
- Career Tech Center AgriScience & Natural Resources class sampled one site with 1 professional and 6 students.
- 9/28/18...4 sites...11 volunteers (In addition to Advanced Biology & CTC AgriScience classes-see above for numbers)
- 5/18/19...6 sites...9 volunteers (In addition to Advanced Biology & CTC AgriScience classes-see above for numbers)

BENEFITS OF THE PROJECT/LESSONS LEARNED:

The stream monitoring and macroinvertebrate ID over the three-year grant period, consistently showed the sites sampled in the fair to good range according to the stream quality scoring system. As Missaukee Conservation District goes forward with this project, future findings will be compared to initial data and any positive or negative diversion from that original grant period data will be noted and discussed with local partners and professionals to keep the portions of the Muskegon and Manistee Rivers in the county as healthy as possible.

SIGNIFICANT INFORMATION/EDUCATION/OUTREACH ACTIVITIES OR OTHER WAYS IN WHICH PUBLIC INPUT WAS PROVIDED:

1. Pond Study/Macroinvertebrate program at Ardis Missaukee District Library June 2017; 25-30 in attendance; recruited 1 new volunteer.
2. Pond Study/Macroinvertebrate program at Ardis Missaukee District Library August 2017; 60+ in attendance from Cadillac Public Schools; recruited 3 new volunteers.
3. Mailchimp monthly newsletters
4. Stream Team newsletters
5. Newspaper articles in both Missaukee Sentinel and Cadillac News
6. Facebook posts
7. Stream Monitoring tab added to Missaukee Conservation District website detailing how the public can get involved, links to MiCorps data page, and information about monitoring.

PROJECT EVALUATION:

Quarterly reports were submitted outlining project goals. Records were kept of education program attendees, and a history of all publications, newspaper articles, website, and social media postings.

PARTNERS/CONTRIBUTIONS:

Lake City middle and high school science teachers, Wexford-Missaukee Career Technical Center AgriScience and Natural Resources instructor, local 4H clubs, NRCS District Conservationist, Missaukee Conservation District Board Members, and community volunteers.

COMPLETED PRODUCTS:

1. Sampling Site Binders: one for each site which included maps with directions and project manager's notes, county maps with site locations identified, list of equipment and contact numbers for project manager and assistant, description of volunteer duties, and collection sheets.
2. Sampling Kits for each site which included sorting trays, tools, collection vials, first aid kits, nets, waders, and buckets.
3. Thank you postcards created for volunteers.
4. Macroinvertebrate ID Guides created.

PROJECT SUSTAINABILITY:

The countywide mileage renewed in 2018 and this current funding source will allow the Missaukee Conservation District to continue stream monitoring efforts and engage our citizens in increased water quality monitoring that will also include participation in the lake monitoring program.

PROMOTION:

Please see attached promotional items.

Signed: Michelle Hill

Date: September 30, 2019

Title: Project Manager