

GRANTEE NAME: Van Buren Conservation District

PROJECT NAME: Paw Paw River and Black River Watershed Volunteer Stream Monitoring Project

PROJECT #: VSM2015-03

PERIOD COVERED: June 2015-June 2017 **DATE SUBMITTED:** October 26, 2017

Project goals and objectives: The primary goals of the VSMP full grant were: (1) Continue the VSMP in VBC, strengthening and further developing it following the success of the MiCorps Start Up Grant. (2) Outreach and educate residents of Van Buren County (VBC) about water quality, current issues and the importance of healthy habitat and benthic macroinvertebrate populations in our local rivers and streams. (3) Provide volunteers with an opportunity to become involved in a project, have hands on experience which allow individuals to feel a sense of ownership in both a project in their community and to water quality and our natural resources. (4) Select site locations within the Paw Paw River and Black River Watersheds that will generate useful data for MDEQ, VBCD, and local agencies and organizations. (5) Host training and monitoring events on collection and identification. Follow MiCorps protocol and standard operating procedures to ensure proper data is collected and entered into the registered database to be used by MDEQ as a monitoring screening tool and used at the local level. (6) Develop a presentation of VSMP, data collected, an event summary and opportunities for the future which can be presented to county commissions, municipalities, partnering organizations, agencies, schools, volunteers and at resident workshops or educational events. (7) Recruit, train, manage and retain volunteers for future monitoring efforts and work to obtain resources that will support a long term VSMP. (8) Coordinating use of data that can be utilized to further prioritize and target area for best management practice (BMP) implementation work perform by the VBCD and to track BMP efficiency and progress in improved water quality.

Objectives were shifted a bit throughout the timeline but most were changed do to timing of collection and identification. Committee meetings were held before and after each collection and updates were given both at VBCD and TRC monthly board meetings. Outreach for the program was steady throughout the year with flyers, email updates, press releases and Facebook posts. Volunteers were recruited by emails, website and Facebook information. The lowest count of participants at a collection was 25 and the largest was 43 therefore volunteer support has been a success. Collections were schedule every spring and fall the first Sunday of the months of May and October. Identification sessions were held the following day at the VBCD office. All protocol from the QAPP was followed at each collection and each identification session. All collected specimens are labeled and stored at the VBCD office. Communication with the MDEQ with locations of testing has been good. All data has been entered into the MiCorps database.

Project success and completed products:

Accomplishments: Project oversight committee meetings were held, program development, outreach, and events were discussed and planned. Project partners participated in the MiCorps training/conferences to gain knowledge, learn collection techniques, network, and brain storm to help in the development of a solid program. Educational outreach about the program was released to the public via newsletters, press releases, social media, flyers, emails, Channel 3 News interviews, radio interviews and word of mouth to create awareness of the program and the recruitment of volunteers. Resident volunteers participated in the local training, collection and identification events. Data was collected and reports were published. Partners worked with MDEQ on locations of sampling sites. Priority of sites were places where MDEQ currently does not have data and locations where data will be beneficial to VBCD's current grants and future grant proposal that focus on education and implementation on farming BMPs that have a direct connection to water quality.

Monitoring Activities: Four VSMP collections were hosted in the Paw Paw River and Black River Watersheds during the VSMP Full Grant followed by Identification Sessions that were held at the VBCD the next day. The spring events were scheduled for the first Sunday/Monday in May and fall events were held for the first Sunday/Monday in October. Event details were as followed: October 4, 2015; 12 sites were monitored, six teams completed two sites each, one river/one stream, with a total of 25 trained participant volunteers for the collection. Seven volunteers helped with the following identification sessions. May 1, 2016; 12 sites were monitored, six teams completed two sites each, one river/one stream, with a total of 25 trained participant volunteers for the collection. Six volunteers helped with the following identification sessions. October 2, 2016; 12 sites were monitored, six teams completed two sites each, one river/one stream, with a total of 27 trained participant volunteers for the collection. Four volunteers helped with the following identification sessions. May 7, 2017; 12 sites were monitored, six teams completed two sites each, one river/one stream, with a total of 43 trained participant volunteers for the collection. Nine volunteers helped with the following identification sessions. **Measurable Results:** Additional partners were added throughout the program and volunteer participation and interest grew. Ninety-six individuals participated in the program. Fourteen sites were assessed and ranged from fair to excellent. Many of the locations identified highly sensitive species showing that water quality is of high standard in areas of the Paw Paw River and Black River Watersheds. Most of the river sites ranked higher than close by streams. All data has been reported on the MiCorps data exchange.

Project barriers/challenges/obstacles/lessons learned: The biggest challenges to the VSMP that we have found thus far into the development of the program is a high water table in the spring and grown up vegetation at many sites in the fall. We have found alternate locations for high water times and will plan on using them on years that it is needed. Other challenges have been Team Leaders taking enough photos during the collection as well as filling out the entire sheet for reporting. This has slowly gotten better as the program develops. Another challenge is having enough Team Leaders for all the volunteers that have been wanting to participate. We have 8 Team Leaders thus far and a steady 6 have been able to participate in each collection, making up 6 teams able to do 12 locations, but when we get a volunteer number of 37, that makes for large teams. We plan to host a Team Leader training the summer of 2018 to see if we can recruit back up Team Leaders in case the volunteer base is so large.

Environmental benefits of the project: Macroinvertebrate results is a sure sign of water quality. VBCD and TRC work with residents, landowners and/or farmers in Van Buren County on best management practices for their home and land that directly affect nearby waterways which in turn effect macroinvertebrate populations. VBCD has current grants that work to educate and implement best management practices on farmland that may have erosion in nearby water. The VSMP results will give project partners a great idea of current status of macroinvertebrate population and water quality and will be a great comparison to see changes in quality and population as best management practices are implemented on the land.

Significant Information/Education & Outreach and Public Input: Press releases were certainly popular with the media, we had interviews with the radio as well as a Channel 3 (Kalamazoo station) joined us in the morning of a collection to interview and show footage of a site. TRC and SWMPC were huge help in getting the word out on Facebook and newsletters and online papers like M-Live and Ag Clips published articles from press releases. VBCD staff attend Salmon in the Classroom events to teach students about river and stream water quality, Decatur Elementary School had a school wide assembly showcasing the program and Paw Paw High School started working with the VBCD and is planning on hosting a collection site at a local preserve. VBCD/TRC plans to continue the program and host collections the first Sunday in May and October twice a year and has had a new professional flyer and poster designed to grab attention of residents to encourage them to participate.

Other Project Evaluation: Project committee met to discuss timeline and tasks of the project as well as success and challenges of outreach, volunteer recruitment and practice collection events. Suggestions came from team leaders who took each monitoring team to their designated locations and volunteers that participated in events on things such as program organization, outreach, additional education, equipment need and other ideas to continue the program's success into the future.

Partners:

Van Buren Conservation District (VBCD)- Grantee, administration on the grant, provided staff time for planning, event coordination and report writing, program and full grant development, attended training sessions and observed others monitoring collections, provided team leaders, maintained volunteer records, communication with media, volunteers and partners.

Two Rivers Coalition (TRC)- Provided educational outreach, recruitment of volunteers, attended training sessions and observed others monitoring collections, provided team leaders, worked with project partners to choose site locations and assured that site locations were safe and accessible pre-volunteer collection, and provided program and full grant development input.

Pokagon Band-provided professional staff to serve as a team leader at collection sites as well as help identify, categorize, and count macroinvertebrates. Also provided nets for collection during practice events

Cardno - Provided professional staff to serve as a team leader at collection sites as well as help identify, categorize, and count macroinvertebrates

Village of Lawrence- Allowed use of park area(s) for training site as well as set up identification stations at park pavilion

Resident volunteers- Donated time to participate in two practice collections and identification sessions

Project sustainability: VBCD and TRC have committed staff, members and volunteers that have taken high interest in this program and plan to participate collecting information that will benefit and better complete the MDEQ data about water quality and macroinvertebrate populations in local watersheds as well as be used on a local level to leverage other federal, state and private grants that will help provide funding to help repair any areas with degraded macroinvertebrate populations and protect waterways that are identified as high quality. The VBCD has passed a county-wide millage for the continuation of programming such as VBSP. The VBCD Board has appropriated funding for the 2017-2018 and VBCD staff supports this funding well into the future. Small grants and local donations will also be sought out to provide upkeep and additional equipment as needed. Partnerships with local businesses, organizations, townships, villages and cities will continue to develop to help spread the word about the program and provide support to continue the VSMP in Van Buren County.

Significant I&E: Photos of activities and copies of flyers, press releases, newsletters, advertisements that were used to promote the VSMP are attached to final report.

Signed:  AJ Brucks
Grantee Representative

Date: 10-26-2017