Volunteer Stream Monitoring, Flint River Watershed

Funds awarded by MiCorps Grant: \$10,111.55

Matching funds by Flint River Watershed Coalition: \$11,516.99

Project duration: June 2010-June 2013

Applicant:

Flint River Watershed

Coalition

400 N. Saginaw, Suite 233

Flint, Mi 48502

Jaime Welch,

Program Coordinator

810-767-7140



Water Monitoring at Clark Drain, Richfield Park, Spring 2013

Project location: Genesee and Lapeer counties

Project partners: Genesee County Drain Commission, Michigan State University-Extension, Genesee County Parks

Project Summary:

The intent of FRWC's monitoring program is to: a.) educate the public on water quality issues within the Flint River Watershed; b.) evaluate current conditions of the MDNRE determined TMDL areas; c.) track trends in water quality changes as land use activities change; d.) be useful as a way of strategically preparing for watershed management activities, climate and environmental issues and e.) establish and continue annual sampling events as a way of promoting watershed ownership and stewardship among the watershed community.

Goals:

The goals of the Monitoring Program is to: a.) collect accurate and representative macroinvertebrate population data for use as a biological measure of water quality, as well as obtaining qualitative habitat assessment data pertaining to the sites of macroinvertebrate collection; and b.) to seek sustainable funding sources and build the capacity of the monitoring program so that it may continue to reach out to more sites and more volunteers.



Water Monitoring Lab with volunteers, Fall 2010

Project Accomplishments:

The Water Monitoring Program has 34 sites to be monitored every spring and fall. Over the last several years the number of volunteer monitors has increased, and as a result, more sites are being monitored consistently than in previous years. The Water Monitoring Program has expanded its volunteer base to include working with local universities, high and middle school students, home school groups, religious organizations, and environmental groups to draw new volunteers into the program.



Water Monitoring at Kearsley Creek, Spring 2011

To ensure that quality standards are being met, volunteer monitor training is held twice a year. This continuing education for returning volunteers and beginning education for new volunteers on the proper monitoring procedure allows for more reliable results to be obtained during assessments and collections.

The development of "Stream Score" letters mailed to homeowners living adjacent to monitored streams has implemented and are sent out prior to each monitoring season. Beginning Fall of 2013 these letters will also be mailed to volunteers to allow them to see the tangible results of their volunteer efforts.

The Water Monitoring Committee meets throughout the year to ensure that the QAPP is being followed and to continue to improve and expand the current program. The data collected is currently shared on the FRWC website (www.flintriver.org) and through various presentations, publications and letters. It is also shared with local and state agencies.

Monitoring Activities:

Every Spring and Fall our Water Monitoring Program sends over 60 volunteers to as many as 34 sites located in several counties, primarily Genesee and Lapeer. Volunteers complete a Stream Habitat Assessment Form and perform benthic monitoring, collecting samples that are taken back to a lab where they are identified and verified by Master Identifiers. Results are reviewed by a Monitoring Committee to make sure protocols are being followed, cull out any scores to be investigated, and a final report prepared. This data is then shared with local and state agencies, as well as on our website and with local homeowners.



Significant Measurable Results:

The results obtained from monitoring seasons are reviewed and evaluated for any signs of decrease in the stream score or any result that is outside expected increase or decrease (such as those seen due to severe drought). Those results that are outside expected norms or show a marked decrease are investigated and those findings reported back to the Monitoring Committee for further action. In the event that further action is warranted, the program coordinator has interviewed the volunteer monitors from the site in question as well as visited the site to attempt to trace the source of the anomalous result.

Water Monitoring at Flint River South Fall 2012