

Rush Creek Watershed Aquatic Macroinvertebrate Survey Full Grant Final Project Report

Project Name: Rush Creek Watershed Aquatic Macroinvertebrate Survey Volunteer Stream Monitoring Project

Grantee: Jamestown Charter Township

Project Goals and Objectives:

This project, which was done through the efforts of Trinity Christian Reformed Church in Grandville, had four primary goals. First, we desired to educate the residents of the Rush Creek Watershed on the importance of Rush Creek for our environment and for the health of our community. Second, we wanted to partner with local high schools and their environmental studies programs to educate students about the importance of the watershed and have them become active participants in monitoring its health. Third, we had a goal of establishing four new monitoring sites and training five teams of volunteers in the collection and identification of macroinvertebrates. And finally, we desired to identify problem areas in the watershed and to begin addressing these in collaboration with other stakeholders. The overall goal running through all of the above is to raise “watershed awareness” in our community so that Rush Creek is not viewed merely as a means of draining water but as an important natural resource.

Our objectives that we set to meet these goals included: have key people attend MiCorp training events, do some training of our own, purchase necessary equipment, look for key partners among local churches and schools, develop an outreach plan to invite many people in our community to our events, hold macroinvertebrate survey events on Rush Creek twice each year following MiCorp protocol and the procedures laid out in our QAPP, use these events to further educate participants about watershed health and responsibility, and report on our progress both through the MiCorp website and the Trinity Christian Reformed Church website.

Goal and Objective Evaluation:

We did successfully hold macroinvertebrate events, following the protocols and procedures noted above, twice each year over the time of the grant. For each event the following were true: First, we contacted everyone on our ever growing contact list to invite them to participate and invite friends, family and anyone else they knew who might be interested in working toward the health of our watershed. This list included representatives from area churches and two public schools that are in our watershed, Jenison High and Hudsonville High. We also announced the events in Trinity’s church bulletin and on their Facebook page. Second, at each event we had a great variety of community and church folks of all ages attending, including teachers and kids from the high schools, and we started each event with a short educational time explaining what we are doing and why we are doing it. Thirdly, we did monitor at the five sights we had committed to monitoring and did use trained team leaders to take volunteers to these sights. We increased our number of trained leaders by holding our own special training session in April of 2018. Fourthly, we recorded our results after each survey event, made these results available on the MiCorp site, the Trinity CRC site, and by email to our volunteers and other participants.

In addition to the objectives related directly to stream survey events, we also took advantage of other opportunities to connect with the community about our watershed, namely by attending an educational fair at Hudsonville High, by submitting a blog post to the MiCorp webpage, and by having the project manager, Gerry Koning, make a presentation at the MiCorp Training Conference in October of 2018. Gerry Koning is also a regular blogger on an AuSable Institute facebook page called Behold, where he blogs about the important of caring for our environment.

In recognition that the Rush Creek watershed is not at optimal health, one way we have expanded the overall “watershed awareness” in the Rush Creek watershed is that the Trinity Stream Team is also now working in collaboration with LGROW and the National Wildlife Federation’s Sacred Grounds project to add raingardens to Trinity’s property and to other properties in the Rush Creek watershed. We want to teach people that the health of the watershed is directly related to what we allow to wash into the creek and that raingardens are a great way to protect the health of our streams by filtering what goes into them.

The trickiest things about running this project have been getting as many volunteers as we would have liked to each event and the unpredictability of weather. There was in fact one event, in the spring of 2018, when we were only able to get to four sites instead of the five we hoped to get to because of the difficulty in finding volunteers for the date we had scheduled. And in the Fall of 2017, there was one site that we did on an alternate date that had such heavy rain conditions that the survey results for that site were quite questionable. But apart from those couple of things, we feel that we have been very successful in meeting all our goals and objectives for this project.

The summary of our monitoring events is the following:

Fall of 2017 – October 14, 4 sites monitored; October 23, 1 site monitored; 28 volunteers
 Spring 2018 – April 21, Training event, May 5, 3 sites monitored, May 10, 1 site monitored, 23 volunteers (note: the training event was at the 5th site, but results were not recorded)
 Fall 2018 – October 13, 5 sites monitored, 25 volunteers
 Spring 2019 – May 14, 1 site monitored; May 18, 4 sites monitored; 20 volunteers, some doing 2 sites

Environmental and Other Benefits:

We have seen that our survey results are fairly consistent, with numbers sticking to the good or fair ranges:

Main Street		Timmerman's		Sunrise Park		Jackson Street		Bursley School	
Oct-17	36	Oct-17	43	Oct-17	31	Oct-17	27	Oct-17	12 Heavy rain!!!
May-18	26	May-17	N/A	May-18	28	May-18	41	May-18	23
Oct-18	37	Oct-18	22	Oct-18	19	Oct-18	45	Oct-18	23
May-18	30	May-18	25	May-18	35	May-18	36	May-18	26

So there is certainly room for improvement. What we want to do then is keep having these events twice per year and keep inviting new people to participate so that the awareness of the importance of and need for care of the Rush Creek Watershed continues to grow. We also do want to take a proactive approach to improving stream health by promoting the use of raingardens, as mentioned above. We had a good turnout to a recent Rainscaping workshop that was held at Trinity so we are excited about working more in that area. In the next few weeks we will begin work on a raingarden right on Trinity’s

property and we will also be installing interpretive signs along the banks of the creek to teach any who pass by about the life in the creek that is so vital to the health of the watershed. We know from our experience in the past years that we can't give up. We can't stop finding ways to get the message out there.

Significant Community Outreach or Input Activities

These activities would include all the things mentioned above that Trinity has been doing in conjunction with its Stream Team survey activities – participation in a fair at the local public school, speaking at the MiCorp conference, publishing blogs and survey results on the internet and on facebook, holding a Rainscaping workshop, installing a raingarden on church property, and installing interpretive signs on the property.

Other evaluation, partnerships, or projects

Our project manager, Gerry Koning, has made connections with many people and organizations that we consider our partners. We are able to share resources with and get helpful input from any or all of these partners: Hudsonville Public Schools, Jenison Public Schools, Lower Grand River Organization of Watersheds (LGROW), National Wildlife Federation Great Lakes Regional Center, the AuSable Institute, and SES Environmental Services. We also have connections to folks who are part of the Plaster Creek Stewards group who have also been very helpful to us.

Project Sustainability

We feel that this project is sustainable because Trinity Christian Reformed Church now recognizes creation care as part of their mission, vision, values and goals and therefore, Gerry Koning, who is also their pastor is able to include creation care work as part of the job description he is compensated for. This will allow Gerry to continue on as the project manager for the Rush Creek Watershed Macroinvertebrate Survey project for the coming years even if other grant monies are not made available for this project. The Trinity Stream Team fully intends to continue to monitor Rush Creek annually, report their findings, and keep exploring ways to bring new life to and appreciation for the watershed.

Significant Photos and Copies of Products

A file that includes our findings along with photos is being sent with this report as a separate document.