



YELLOW DOG  
Watershed Preserve

# YELLOW DOG WATERSHED PRESERVE, INC

SINCE 1995

*Preserving and protecting the Yellow Dog Watershed in its most natural state, for  
now, and for the benefit of future generations.*

*Our water  
Our legacy  
Our future*

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## Salmon Trout Volunteer Stream Monitoring Project #: VSM2012-04 Grantee: Yellow Dog Watershed Preserve Final Project Report July 2014

### Summary

Since 2012, Yellow Dog Watershed Preserve (YDWP) staff and volunteers have conducted regular monitoring of the Salmon Trout River with a grant from the Great Lakes Commission through Michigan Clean Water Corps (MiCorps). We have successfully completed our objectives for monitoring all eight sites on the river for four sampling events. Results from our monitoring have been compiled at the YDWP office for trend analysis, and we have built the foundation for a lasting program and plan to continue. Our volunteers include: land owners, board members, DEQ officials, and retired NRCS employees. They have all worked in collaboration with our organization to collect this important data. Additionally, we have trained two individuals who have gone on to apply and secure funding for two new MiCorps volunteer stream monitoring programs for nearby watersheds through conservation district offices in Marquette and Alger County.

### Goals and Objectives

The initial goals established for the Salmon Trout Volunteer Stream Monitoring Project (STVSMP) included: developing awareness and volunteerism, training participants in monitoring, collecting water quality data on the Salmon Trout River, making results available to interested parties, grant implementation, and assessing the project. We have followed our goals and accomplished almost all of the tasks outlined in our work plan. Our staff and volunteers did run into difficulties mostly due to

factors outside of our control, such as: severe weather events, road blockages, landowner issues, and dangerous high water. YDWP is accomplishing a lot with very little human resources, and we have established the foundation to continue this program indefinitely.



Figure 1 Salmon Trout Volunteer Stream Monitoring Training spring 2014 at the Yellow Dog River for practice. Photo by Jeremiah Eagle Eye.

## Outreach and Training

Over the past two years YDWP has trained nearly 60 volunteers to help us with this project. We have recruited people through a variety of media, including: 4 printed publications and 5 online media outlets. We have reached out to 12 civic groups, and attracted many new participants. YDWP has promoted this project in 11 public presentations or training sessions. The closest town within our watershed, Big Bay, is rural and isolated. Yet, we have succeeded in gathering a great deal of active supporters. The STVSMP project has recently graced the front cover of our local Marquette area newspaper, the Mining Journal, and was featured in an article on page A3 on another occasion. We have successfully trained our participants in monitoring protocols. Our staff have been evaluated and certified by the MiCorps administration, and participated in an 8 hour MiCorps training session. In addition to providing training sessions for volunteers we also began organizing specific training sessions so volunteer leaders were acclimated with QA/QC procedures and prepared to lead groups in the field.

Table Summarizing Training Events for STVSMP		
Season/Year	# of People at each event	# of Volunteer Hours
Fall 2012	34	178
Spring 2013	6	60
Fall 2013	9	96
Spring 2014	14	176
<b>Total</b>	<b>63*</b>	<b>510</b>

\*About 5 volunteers continue to return each time so the total number of attendees is about 58

## Monitoring Events and Evaluation

We were successful in collecting water quality data through this project on almost all occasions, however we did run into some problems. During the third quarter of 2013 our field crew was not able to survey the Snake Creek site due to an impassable washout caused by severe weather and erosion. This washout was eventually restored after notifying the landowner. Other than that event, YDWP was able to sample all eight sites on four sampling periods including macroinvertebrate collection and habitat assessment. During all four sampling periods we struggled to gain access permission to reach three of

our eight sites that are within the private and restrictive Huron Mountain Club (HMC) boundary. We ultimately succeeded every time due to our persistence. The high security level required YDWP to jump through several administrative hoops each time we sent volunteers to our sites, including: receiving permission from the chairman of the board, notifying the gate guards, naming all participants, and leaving in a timely fashion. YDWP supplied the HMC administration and property

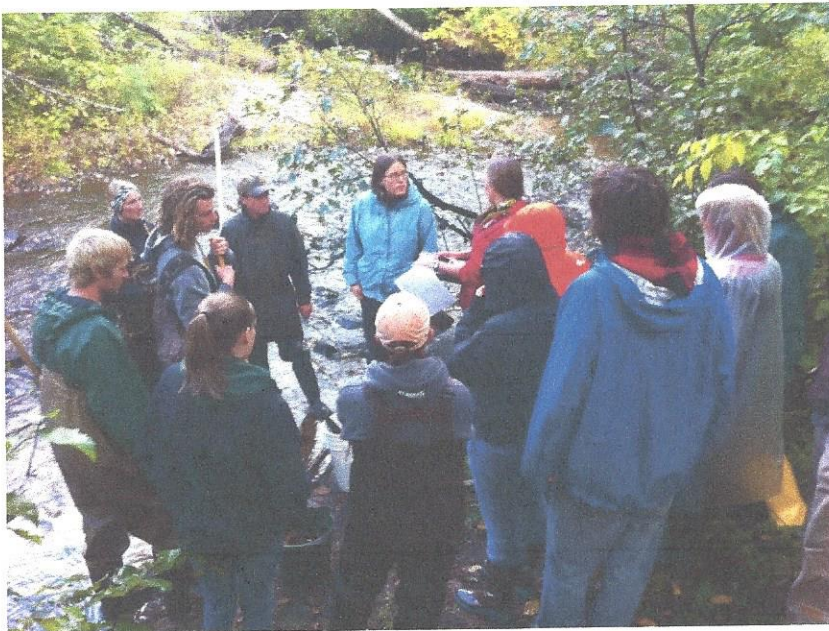


Figure 2 Volunteer Stream Monitoring Training Day in the classroom (May 2014).  
Photo by Jeremiah Eagle Eye.

manager with our QA/QC plan accompanied with a letter of support from the Keweenaw Bay Indian Community Natural Resources Department in hopes of guaranteeing future permission. The long-term success of this project will always be subject to change dependent on the extent of permissions granted by HMC, but have established an excellent track record.

### Other Evaluation

The project results have been furnished to many interested parties, including: our membership, watershed landowners, volunteers, online supporters, and other organizations. YDWP published information to our newsletter, our website, and social media sites. We provided the results in power point presentations at the MiCorps conference, to local watershed stakeholders, at trainings, at our annual meeting, and for the local Sierra Club. However, we have not yet created a volunteer monitoring report, which will include results from all sampling events to-date. The results from post-training volunteer evaluations were mainly positive and indicated that the volunteers were enjoying the program and having fun.



*Figure 3 Volunteers enjoying the field portion of monitoring training in fall 2012.*

The implementation of this grant was successful because of the dedicated support of YDWP staff and board members who were involved. We submitted all quarterly status and financial reports, the final report, release of claims statement, the QA/QC plan, deliverable products, and maintained accurate recordkeeping. The project was a success because of the efforts of our partners and supporters. Superior Watershed Partnership provided an initial letter of support with the grant application. The Huron Mountain Club has allowed access to three of our sites on all four occasions.

Additionally, the Keweenaw Bay Indian Community has expressed its support in a letter to HMC.

### Project Benefits

The benefits of this project extend beyond the creation of a baseline database of total stream quality scores for the Salmon Trout River Watershed. The creation of a baseline database will be a useful reference for the future data collection that will continue in years to come. Any changes that might occur in water quality could have an impact on these total stream quality scores, and those changes can be monitored over time and connected to sources and causes. There were also social and economic benefits for the local community. Dozens of youth, adolescents, young adults and retirees were able to experience the outdoors and enjoy the natural resources. College students who became Stream Leaders have been gaining real-world conservation experience by volunteering for us in this project. They will be

able to include the experience on their resumes, and it might help them securing work in the future. Our organization learned about volunteer recruitment, volunteer coordination, working with multiple age groups, and coordinating events through this project.

### **Project Supporters**

The support we received for this project was mainly in-kind and came from a diverse group of individuals. We did receive some organizational support from the NMU Wildlife Society who helped our group promote our trainings and brought in a group of students to help. We also received support from the Powell Township School who provided a classroom space by-donation for use during our training. We received a donated bug shirt for \$56 from Big Bay Outfitters which helped us complete the work during the nasty late May bug hatches. Our group also received support via a grant from the River Network for \$890 going towards fieldwork equipment, emergency first aid, and an emergency field communication system that improved field safety. We also received a donation of \$500 from Pamela McClelland to help continue the project. Finally, by approving our access to the property, the Huron Mountain Club has shown support for the continuation of this project.

### **Products Completed**

Yellow Dog has been able to put together a water quality database for the Salmon Trout River Watershed. The data we collected over 4 sampling seasons at 8 sites will be used in comparison with future results. The information was published in three issues of our newsletter, the Yellow Dog Howl. We printed flyers for every sampling season and distributed them around our community. Yellow Dog is in the process of creating a user-friendly brochure to describe the state of the watershed.

### **Project Sustainability**

Yellow Dog Watershed Preserve will continue seeking funds for our Water Quality Program which encompasses this project. We have about 300 active members who support our collective cause. The watershed is currently being impacted by a great deal of road construction for a haul road made for the Lundin Eagle Mine since our last sampling period in May 2014. One site on the East Branch of the Salmon Trout has been recently polluted with suspended sediment from the rupture of a spring during road construction activities in mid-July 2014. YDWP notified the Michigan Department of Environmental Quality about the issue, and we will soon be discussing our data more thoroughly with the Department as we gather more results. The potential for on-going water quality issues related to the mining issue makes monitoring the Salmon Trout River a priority for our organization and our members.