Friends of the Pentwater River Watershed August 2023 Update



It has been a fun summer for the Friends. Here are the updates.

1. Watershed Household Survey

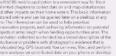
- The survey is now fully funded, and the contract signed with GVSU. The survey is planned for this fall.
- Funding was obtained from Fly Fishers International (\$2,700), Oceana Community Foundation (\$2,500 from the Investment Fund and Eugene Kuhne Fund), and private donations of \$3,600.
- Address lists are being created by Jamie Way at the West Michigan Regional Shoreline Development Commission. Jamie can use her ARC-GIS database and the watershed layer to create the list. She has been able to do Mason and is working on Oceana County. ARC-GIS can also do the riparians for us. Our volunteers will help us identify key watershed people to include in the survey.
- Need volunteers to work on a committee to give input into the design of the survey and finalize the mailing list. Please contact me by September 1st.

2. Road Stream Crossing Inventory

- The inventory report is attached.
- Good news Jamie Way was able to transfer the data from the TU app into her database.



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3. Watershed Tour

• Based on the Inventory information a 4-hour tour of the watershed was created. See attached.



- The tour starts and finishes at Up North Market which is located between the two branches of the river.
- The North Branch tour is a little over 2 hours and the South Branch tour is a little under 2 hours.
- We are in discussions with the Conservation District to add a tour to their spring activities.

4. Tour with EGLE Water Resources Division Representatives

- A tour was conducted in July with Hannah Arnett and Nathaniel Shuff from EGLE Water Resources Division. Gary McKeen also joined the tour. Hannah coordinates large water withdrawal permits and Nathaniel is a geologist who conducts assessments.
- The crossing inventory identified that 12% of the road/stream crossings identified in the 1990 USGS data are now dry. This created the question of whether water use was a problem.
- Hannah indicated that most if not all new permit requests were for wells and not river withdrawals.
- Linda Herremans from the Conservation District is copied on all new permit requests in the county. She is a great resource with lots of historical and current knowledge. She indicated that most farmers that use wells for irrigation also sink monitoring wells to assure they are having no impact on the groundwater table. She also indicated that there are few direct river withdrawals anymore.
- Hannah indicated that well water withdrawals have little impact on the river water.
- As a result of the tour the group came back two days later and tested flows in some of the tributaries. The results looked good and raised no concerns.
- The tour also allowed the group to establish good monitoring sites to use going forward to assure the watershed stays in good shape.
- The tour was very beneficial for both parties. It answered our questions on water use.

5. Tour with Trout Unlimited (TU)

- On August 2nd a watershed tour was conducted with four representatives from Trout Unlimited and the Conservation District. The Trout Unlimited representatives were Jake Lemon, Monitoring and Community Science Manager for TU national currently working on the White River, Kristin Thomas, Michigan Stream Restoration Director, and Jordyn Stoll, Michigan Aquatic Biologist. Sky Harsh joined from the Conservation District.
- Their interests were to become familiar with the watershed, discuss potential future projects, and learn about dams in the watershed.
- They were impressed with the health of the watershed.

- We discussed possible culvert replacements in two locations. On the South Branch at 144th Ave where the perched culvert restricts fish passage to the upper 25% of the river. The first step is to conduct fish surveys above and below these locations to determine the current situation. On Lambricks Creek at Harrison Road is another perched culvert. Again, a fish survey would be the first step. Both culverts would be major projects and significant motivation would be required.
- We looked at four of the 17 known dams in the watershed. After the tour a report was created showing the location of the dams in the watershed. See below. Of the dams, 14 are private, one is owned by the City of Hart, and two are owned or partially owned by the county. Dam removal is a priority for TU because of the impact on water temperatures. Dam removal is a key imitative to reverse the effects of global warming.





- Jordyn Stoll is working on a Survey123 App for recording locations of Didymo. If you would like to learn more let me know.
- A big thank you to the TU folks for spending time and getting to know us.

6. Sandy Bend Project

With the completion of the 60% engineering study for the Sandy Bend restoration project there is now interest from NOAA in potentially funding the implementation in the next round of projects. Tours of Sandy Bend are still available.

7. Road Commission Meeting

On August 9th Rich Pugsley and Gary McKeen attended the Road Commission Board meeting and presented the Road Stream Crossing Inventory Report. This is the first step in working with the Road Commission. The report generated good interest.



8. E. coli Source Tracking

Maximum *E. coli* readings of >2420 cfu/mls have been recorded in both the south and north branches this summer. To identify the potential sources a request has been made to the ANNIS Water Resources Institute to do Source Tracking testing on the collected samples. The source tracking looks for the presence of human, pig, cow, or ruminant (wildlife) markers. The results are



expected in October. This testing is being paid for by the Pentwater Lake Improvement Board and is being done as part of a Quality Assurance Project Plan created for this purpose.

9. Hart Lake Chemical Treatments

The analysis of Hart Lake weed treatment chemicals flowing over the Hart Dam into the South Branch was not completed this summer. The date for the first treatment was not received in time and the chemicals used in the second treatment could not be identified by the lab.



10. Crystal Valley Dam

- The Oceana County Commissioners have approved funding for completion of an engineering study to identify the cost of repairing the Crystal Valley Dam. This study is the next step in decision making relative to the dam.
- Jake Lemon, TU, took temperature readings in July 22 and found a 7.6 °F. difference between the water entering the pond and the water below the dam.



11. Next Face-to-Face Meeting

Next face-to-face meeting will be to review the draft household survey. Stay tuned for a time this fall.

Thanks to everyone for your interest and support. Open to any suggestions and watershed information that could help protect the watershed.

Rich Pugsley

PLA Chairman, Friends of the Pentwater River Watershed