LITTLE RIVER NEWS

Hite Matershed Conservation

WINTER 2022-2023



by David Spruance

I first met John Gorys on a late spring evening in 1994 or 1995. I was sitting outside watching the setting sun play kaleidoscopic colors on the river's surface when I heard a raspy voice coming around the corner of the cabin, "Hello, anyone here." A small sprightly man appeared carrying two bottles of beer. "Mind if I join you?" he asked as he handed me one of the bottles. After introductions, he began telling me about his plan to start an organization dedicated to preserving the pristine nature of the river, and I was surprised by the thoroughness of the details. It was not until I joined John on water sampling collections, LMWCC's first efforts to monitor water quality, that I learned John had walked to my cabin as he had done to so many other places up and down the river.

LMWCC co-founder John Gorys passed away on October 15th. John was a quiet yet determined visionary whose tireless energy and love for the Little Manistee River will continue as long as each of us is committed to the preservation of our priceless resource.

When I joined the LMWCC board in 2009, John presented me with a stack of file boxes containing press releases, copies of the LMWCC newsletter, correspondences to and from a host of federal and state officials, including the then Secretaries of the Interior and Agriculture, and he head of the Michigan DNR. It was fascinating to go through each box reading about LMWCC's early attempts to secure both state and federal protections for the river, develop a Watershed Management Plan, establish a set of regulations to limit development not just on the riverfront but within the entire watershed. Much of what John envisioned has come to pass, a lot of it through his efforts, the rest through the LMWCC's commitment to carry on his legacy, but each of us who loves the river is indebted to and responsible for following the path he blazed.

A Letter from LMWCC President Armas Soorus

Over the past few years, we have encountered many instances where landowners along the Little Manistee River and its tributaries have cleared banks to erect buildings on the water's edge or make access points, installed docks, put paths or roads on the flood plain and even built an island in the stream. Often this is done without any permit because the landowners believe there is no zoning, so no permit is necessary.

There are in fact two entities that a riparian landowner should contact before doing any excavation or construction in or near the river, so they don't find themselves in violation of state or federal regulations and facing fines and rework. Both the state and federal regulations and permitting processes are complex and far beyond my ability to concisely describe here. I suggest you contact the people listed below before you do any work in or near the river.

The Michigan Department of Environment, Great Lakes and Energy (EGLE) is responsible for administering the Clean Water Act of 1972 (CWA) in Michigan. The CWA is the primary federal law in the US governing water pollution. Its objective is to restore and maintain the integrity of the nation's waters and helps the states address pollution. The act requires an EGLE/USAE Joint Permit application for certain work along the river. You can see the details at: <u>www.michigan.gov/egle/about/</u> organization/about.



Before doing any work along or in the Little Manistee River you should look at the web site above and then talk to an EGLE representative to review your ideas and help you understand what the regulations are and if a permit is required.

The federal regulations that apply are related to the Wild and Scenic Rivers <u>Act</u>. Congress intended this act to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Little Manistee River was designated as a Wild and Scenic "Study" River by Congress in the early 1990's. Until the study is complete, the federal government treats the entire river as if it were a fully designated Wild and Scenic River.



The regulations and permits admittedly add more work, time and expense to our life along the river. Understanding and following these rules not only protects us as individuals from fines and rework, it protects the river as a shared resource whose wild and scenic nature is the reason many of us are here in the first place.

The Battle Against Invasive Species Goes On

by Joyce Durdel

When the Little Manistee Watershed Conservation Council began work on the 2020 Little Manistee River Watershed Management Plan, the board chose to include 'monitor and remove invasive species' as one of the goals important to the health of our watershed. The North Country Cooperative of Invasive Species Association stepped up early to help put meaningful actions into the plan. Together we are now in the process of collecting data on terrestrial invasive plant species along the river corridor. NCCISMA'S Vicki Sawicki, Invasive Species Program Coordinator, and Zach Peklo, I.S. Technician, along with a little assistance from LMWCC volunteers Armas Soorus, Joyce Durdel and Captain John Gouker, goukerflyfishing.com, conducted summer surveys in 2021 and 2022 making observations while floating the river corridor.

A number of invasive species were identified and documented, and the information was shared with property owners in hopes they will act to remove them along with the threat to native species created when they are allowed to proliferate. Carolyn Henne, Botanist, with the US Forest Service also stepped up with USFS staff to coordinate, monitor

with the US Forest Service also stepp up with USFS staff to coordinate, monito and treat terrestrial invasive species on National Forest lands located in the Little Manistee River watershed. The USFS workers and volunteers will monitor and take action to remove those invaders.

Species found in varying amounts along the river include Autumn Olive, Bells Honeysuckle, Bigleaf Periwinkle, Black Locust, Canadian Thistle, Crown Vetch, English Ivy, Japanese Knotweed, Lily of the Valley, Phragmites, Purple Loosestrife, Scots Pine, Snow on the Mountain, Winged Burning Bush. NCCISMA staff are experts in the identification and removal of these species and more. Contact them @:

www.northcountryinvasives.org.

The LMWCC wants to say 'Thank You Very Much' to NCCISMA and NFS staff and volunteers for their great efforts in finding and giving treatment advice on controlling those tough invasive species and giving native species a better chance to thrive in our beautiful and still wild Little Manistee River watershed. Reports on our river monitoring and projects can be found on our lmwcc.org website.



Armas, Zach, Captain John and Vicki work together to find invasives along the Little Manistee River. Thanks for the great work you are doing! Joyce Durdel, LMWCC

MACROINVERTABRATE SURVEYS LITTLE MANISTEE RIVER

	COLLECTION SITES:	YEAR >	2016	2017	2017	2018	2018	2019	2019	2020	2020	2021*	2021	2022	2022
		Day >	10/17	5/6, 5/13	10/14, 10/22	5/19, 5/20	10/9, 10/13	5/14, 5/18	10/5, 10/7	5/19, 6/8	10/10, 11/5	5/15, 5/22	10/2, 10/16	5/14, 5/21	10/6, 10/13
1	6 Mile Bridge - NW Access		49	66	23	41	51	55	43	NS-↑deep	39	3.00	3.90	3.30	3.30
2	Cool Cr W of Hamilto	on Rd.	37	33	36	41	43	47	49	47	42	3.30	4.30	2.60	3.70
3	Johnson Bridge		34	30	35	26	44	57	45	47	40	3.22	3.40	2.90	3.00
4 Indian Bridge			NS	50	37	23	28	40	54	45	38	3.59	3.69	2.57	3.81
5 Old Grade Campground			NS	42	NS	35	50	41	43	58	52	3.73	4.06	3.88	4.46
6 Below Queen's Highway NS			NS	47	NS	50	45	37	55	51	50	3.18	3.30	3.31	3.34
Prior years' data are on file with LMWCC.															

October 2016-2022 LMWCC - MCD - MLCD

* New calculation method applied going forward.

Stream Quality Score Rating using the MiCorps Volunteer Stream Monitor Program standards:

EXCELLENT = 0.0-3.50 VERY GOOD = 3.51-4.50 GOOD = 4.51-5.50 FAIR = 5.51-6.50 FAIR/POOR = 6.51-7.50 POOR 7.51-8.50 VERY POOR = 8.51-10.0

Partners on this project:

Sites 1-3 - Manistee Conservation Dist. - Chelsea Cooper, Cons. Tech., Alicia Symanski, WQ Intern, Renee Mallison, Dir., www.manisteecd2.org Sites 4-6 - Mason-Lake Conservation District - Abbey Hull, Cons. Intern, Dani McGarry, Dir., www.mason-lakeconservation.org

Mecosta & Osceola-Lake Conservation District - Asst. - Mark Sweppenheiser, Dist. Mgr, Alex Svoboda, MAEAP Tech., www.mecostacd.org LMWCC - Joyce Durdel, WQ Coord., Armas Soorus, Pres., Wayne Anderson, Proj. Coord., Jim Squier, V. Pres., www.lmwcc.org



These aquatic insects indicate this is healthy stream.



LMWCC - MCD/MLCD INTERNS/TECHS. 2021/2022 Abbey Hull Alicia Symanski Chelsea Cooper

LMWCC Site #	Collection Location	Total	E. coli	Dissolved	Total	Air	Water	Time
		Coliform	Col	Oxygen	Phos-	Temp. °	Temp.	E.S.T.
					Phorus,	~ -		
	Detection Limits >	Colonies/	100/	mg/L	mg/L	°F	°C	
		100 mL	mL					
1	L.M. Below Luther Dam	1000	200	9.1	<.05	67	17	8:15
6	L.M.@ N Rivers Ldg M63	1200	250	10.5	<.05	67	15	8:30
11	L.M. @ Poggensee Bridge	160	40	8.0	<.05	70	16	9:00
13	Cool Creek @ 18 Mi. Bridge	120	80	8.5	<.05	70	17	9:45
16	Cool Creek @ Cool Lake	140	2	9.4	<.05	70	23	9.15
18	Cool Creek @ Hamilton Rd.	110	40	9.2	<.05	70	21	9:30
19	L.M. @ 9 Mile Bridge	110	57	10.0	<.05	73	18	10:00
21	L.M. @ DNR Wier	1400	150	10.7	<.05	76	17	10:45
22	L.M. @ Stronach Road	150	98	10.5	0.14	76	17	11:00

Please refer to the Imwcc.org website for a brief explanation of water quality surveys test results, or refer to other references on water quality standards.

Results from Trace Labs and EGLE Envrionmental Laboratory

Report by: Abbey Hull

THE HEALTH OF OUR RIVER

Mason-Lake Conservation District, with help from the Little Manistee Watershed Conservation Council (LMWCC), hired intern Abbey Hull again to help with the 2022 monitoring season of the Little Manistee River. She compiled past data and collected chemical, physical and biological data for 2021.

This year the Little Manistee River's Quality Assurance Protection Plan (QAPP) was accepted by Michigan's Clean Water Corps (MiCorps). MiCorps is a network of volunteer programs run by the Department of Environment, Great Lakes and Energy (EGLE). Through these programs, lake and river associations around the state receive training to collect and share water quality data. Every association with a QAPP in place with MiCorps receives the same training and protocols to ensure comparable data. MiCorps will also store habitat assessment and macroinvertebrate survey data on their site. This data can be accessed by the public and by other lake and river associations.

In July, Hull went to ten sites on the Little Manistee River to collect chemical and physical data. Information on dissolved oxygen, temperature, *e*. *Coli*, and phosphorus were gathered. The samples were all tested by Trace Labs. Results were then compiled and compared to previous years at the same sites. Due to high levels of *e*. *Coli* in 2021 extra samples were taken throughout the season.

Habitat assessments were performed in late July with help from Chelsea Cooper and Alicia Symanski from the Manistee Conservation District. Habitat assessments were completed on three sites: Indian Bridge (LM04), Old Grade Campground (LM05), and Queens Highway (LM06). Site LM04-LM05 are the same sites where macroinvertebrate sampling is done every spring and fall. Habitat assessment help determines if erosion, pollution, or other degradation is occurring in the stream.

Macroinvertebrate surveys were completed in May and October. Macroinvertebrates are creatures that are large enough to see (macro) without a backbone (invertebrate), such as snails, insects, crayfish, etc. Chemical data is great for a snapshot of water quality at a specific date and time but doesn't give a full picture. As macroinvertebrates are living in the stream year-round, they can give a better big picture of stream health. Macroinvertebrates have varying levels of tolerance to pollution in streams. The more sensitive macroinvertebrates we find in our sample, the healthier the stream.

All of these parameters help create a clear picture of stream health. This large watershed spans four counties in Northwest Michigan. Keeping the river clean and healthy also helps keep the Great Lakes healthy. Over the past several years, data has been collected and has helped create a baseline for the health of the Little Manistee River. Overall, the Little Manistee is a very healthy river. The majority of chemical and physical data are in acceptable ranges. The main concern is E. Coli levels and the occasional phosphorus spike. Habitat surveys showed there are some areas with heavy erosion and potential future sites of erosion. Habitat assessments are recommended to be completed every five years. However, if there is a particular concern they may be completed sooner. The macroinvertebrate surveys continue to show healthy stream quality and are an easy way to get the community involved with river health. The full report can be seen at www.lmwcc.org



MEET OUR INTERNS

In 2022 LMWCC co-sponsored interns, with the Manistee Conservation District, Alicia Symanski and with the Mason-Lake Conservation District Abbey Hull. Each of these remarkable young women has had a major impact on the workings of the Council during their tenures.

Alicia graduated from NorthwesternMichigan



College's Freshwater 🌇

Studies program, and has held positions that provided an array of learning and work experience. They include writing educational programs for Inland Seas Education Association, creating a baseline water quality dataset for Bunaken National Marine Park (Indonesia), leading invasive species removal teams in forested, wetland, and coastal dune environments with the Grand Traverse Conservancy, Regional Land native landscaping, and mentoring high schoolers in ArcGIS. She has done photography and written content for generated most organizations she's worked for and has a history of helping build systems that increase organizational capacity.

For LMWCC, her work was primarily focused on communication and outreach. While she assisted with monitoring area waterways and public events, she also wrote and designed a homeowner's guide to river care under the Natural Rivers Act and convinced many area businesses and libraries to host a copy of the Little Manistee River Watershed Management Plan. Working jointly with the Manistee Conservation District and the Little Manistee Watershed Conservation Council to meet their conservation goals over the 2022 season was a perfect fit for Alicia.

Abbey Hull has a degree in Mathematics and two in Freshwater Science. "I love looking at data, and I say hello to every river and lake I see. This internship was such a perfect fit- I did it twice! It is really wonderful to work with people who care so deeply about our natural resources as myself. 2021 was a busy year for me, I did 4 of my 5 semesters at WMU and graduated, I got married, I celebrated 1 year of owning a house, I went to the hospital twice and I got to work at the MLCD. Some of those things are much better than others, and I really loved my time with the LMWCC. I originally wanted to work in a water quality lab, but now I love field days. The water feels more alive outside than in a lab. I feel honored that I was able to come back to the MLCD this year, and that a grant allowed me to stay on longer and receive a pay increase. In the past year through outreach with the MLCD and another internship, I have decided to get my teaching certificate and go into some form of education! For now, I am still working with the MLCD remotely, I live in TC with my husband, 3 cats, and as of recently 3 chickens!"



Parts of Abbey's work have been presented on the previous page. The entire document can be read at the LMWCC website. It is impressive.

Alicia's major contribution to the work of the LMWCC, a comprehensive discussion of the Natural Rivers Act, will be mailed soon to all property owners within the watershed.

MORE LMWCC NEWS

Annual Meeting

The LMWCC board of trustees continues to look at ways to improve the annual meeting in order to encourage greater membership turnout. The annual meeting is important for several reasons: It is an opportunity for members to learn first-hand about the activities of their council during the preceding year, and outside speakers offer information on specific aspects of on-going conservation efforts throughout the state. It is the LMWCC's only fund-raising event, and the monies raised help to support the council's efforts to protect and conserve our resource throughout its watershed. And finally it is our only chance to exchange ideas about the direction of the council and to re-connect with our neighbors who share the concerns of maintaining the pristine nature of the river and its surroundings.

Obviously Covid adversely affected our ability to convene and negatively impacted the council's fund-raising efforts. The board is discussing various means of making membership attendance at the annual more a more attractive experience.

Membership Renewal

By now members should have received a membership renewal form. Your continued financial support is vital to the work of the council. There are considerable costs involved in implementing the many aspects of the Watershed Management Plan, adopted in 2020 and subsequently approved by the State of Michigan and the federal Environmental Protection Agency. The drafting of the plan was in itself a major investment. The board two years ago committed to co-sponsoring with both the Mason Lake and Manistee Conservation Districts interns to assist with gathering data on the health of the river as well as communicating to the general public information relevant to the workings of the council.

The costs of in-stream habitat improvements and restoration, long an integral part of the council's work, continue to rise, and the board is exploring ways to limit its expenses. The stream erosion survey recently completed by CRA indicates that erosion control remains a top priority for habitat preservation. You are asked to consider making an additional contribution to LMWCC above your nominal membership fee. With the passing of cofounder John Gorys, you might consider a donation to the Howard Roberts fund, monies strictly reserved for in-stream improvements, in John's honor.

The board is increasingly concerned about the aging of our membership, and each of us is encouraged to talk with our upstream and downstream neighbors about joining and supporting the LMWCC. We are the sole stewards of the Little Manistee River. All members are eligible to join the board of trustees, and fresh ideas and new perspectives of the operations of the council are always welcomed.



More News Continued

Natural Rivers Act

At its November meeting the LMWCC board of trustees unanimously agreed to conduct "expeditiously" the gathering of data pertaining to the pursuit of a Natural River designation for the Little Manistee River. According to the Michigan statute passed in 1970, it is incumbent upon the Michigan Department of Natural Resources to identify particular rivers for potential protective designation under the law and to disseminate information about the program to all affected parties, public and private. The DNR is then to begin a series of open, community discussions on how best to develop a conservation plan for that particular river. The idea is that community input involving private citizens as well as public and governmental agencies is the most effective way to create a plan that is at once equitable to all concerned and responsible for ensuring that future riparian development has no deleterious impact on the river, maintaining the river's as near to natural state as possible.

While the Little Manistee has received consideration for a natural river designation in the past, the DNR is, for their own reasons, reluctant to begin the process. As a result, the LMWCC board has decided to inform concerned parties about the program, hire a consultant to create a scientific survey to be conducted within the watershed, seek the DNR's approval of the survey's validity, distribute the survey to LMWCC members as well as property owners within the watershed, and then share the results of the survey with the appropriate officials at the DNR. Once the data has been collected and shared, it is left to the DNR to determine whether or not it is willing to undertake and direct the process in accordance with the 1970 statute.

The board is unanimous in its support for the Natural River designation as a means "to

preserve, protect and enhance our state's

finest river systems for the use and enjoyment of current and future generations by allowing property owners their right to reasonable development, while protecting Michigan's unique river resources."

Alicia Symanski, LMWCC/MCD intern, has composed an informative brochure detailing the processes entailed in obtaining a Natural River designation as well as the benefits thereof. It explains that there is minimal impact on existing structures in the NR corridor and how the statute focuses on mitigating the impact of future development along the river by creating, through community discussion, a system of guidelines to make sure that the riparian zone and therefore the river are protected from harmful land uses. That brochure will be in the mail shortly.

LMWCC has contracted with Amanda Buday of Grand Valley State University to compile a comprehensive survey for gathering feelings for and reactions to a Natural River designation for the Little Manistee. Once completed the survey will be submitted to the DNR to make sure that it approves the content and will accept the tabulated results as a valid representation of community sentiment. The DNR will also suggest a structure for a rational and legitimate random distribution. LMWCC will mail out the survey accordingly, and once the results have been collated, they will be forwarded to the appropriate officials at the DNR.

How the DNR responds is dependent on factors beyond LMWCC's control, but the LMWCC board feels confident that it is doing all that it can to provide the DNR with enough information and data to make their decision.



Little Manistee Watershed Conservation Council P.O. Box 52 Irons, MI 49644

