### MiCorps Volunteer Stream Monitoring Program Monitoring Fact Sheet

Organization Name: Manistee Conservation District

**Monitoring Program Name:** Lower Manistee River Watershed Volunteer Stream Monitoring Program

Watersheds Monitored: Lower Manistee River Watershed

County(ies): Manistee, Wexford, Lake, Mason

**Program Manager:** Chelsea Cooper, chelsea.cooper@macd.org

Fact Sheet Updated: 01/28/2021



**PROGRAM DESCRIPTION:** All 9 sites were monitored both in the spring and the fall of FY21 in addition to 9 habitat assessments. All of MCD's test streams scored within the 3 highest quality tiers of the MiCorps biotic index scoring system, indicating high-quality conditions on average within our 9 test streams. The average score for 2021 was 3.6, which falls at the higher end of "very good". Because we have been collecting data on these sites since 2016, the data is no longer considered "preliminary". However, the changes to the scoring system should be considered, and this year will begin a new data set until all of our historical samples can be recounted. A full recount under the new scoring rubric will allow us to have a more comprehensive timeline of data to interpret overall results from. Differences among streams have been relatively consistent throughout the years and have increased under this more accurate method. It will be interesting to re-score our historical samples and determine if a more accurate system increases our historical ratings. For example, Fletcher Creek and Sickle Creek have increased scores since we began, but they have consistently been the two lowest scoring sites. Going forward into 2022, special attention will be focused on determining the cause for this, including inspections of localized road crossings and culverts. In addition to these areas of focus, we will also be enhancing our volunteer training techniques next year and bringing back our "Stream Team Leaders" strategy to ensure we're continuing to get the most out of this program.

### **PROGRAM FAST FACTS**

# of Years Monitoring: 6

# Volunteers participating annually: 18-23

# Active Monitoring Sites: 9 (spring/fall)
# Excellent Quality Sites: 9
# Very Good Quality Sites: 5
# Good Quality Sites: 3
# Fair Quality Sites: 0
# Fairly Poor Quality Sites: 0
# Poor Quality Sites: 0
# Very Poor Quality Sites: 0

Link to Monitoring Program: https://www.manisteecd2.org/volunteer-streammonitoring-program

Link to Quality Assurance Plan: https://www.manisteecd2.org/uploads/b/705b14d0-

#### Stream Volunteers- Fall 2021



# **RESULTS:**

Site ID	Stream (Spring 2021)	WQR	Result:
BM01	Adam's Creek @ 16 Rd	3.2	EXELLENT
BM02	Fletcher Creek	4.7	GOOD
BM03	Hinton Creek	3.1	EXCELLENT
BM04	Sickle Creek	4.1	VERY GOOD
LM01	Little Manistee (Downstream)	3.0	EXCELLENT
LM02	Cool Creek	3.3	EXCELLENT
LM03	Little Manistee (Upstream)	3.2	EXCELLENT
BC01	Bear Creek @ Leffew Rd	3.1	EXCELLENT
BC02	Spirit of the Woods	3.1	EXCELLENT
Site ID	Stream (Fall 2021)	WQR	Result:
BM01	Adam's Creek @ 16 Rd	3.4	EXCELLENT
BM02	Fletcher Creek	4.8	0000
		4.0	GOOD
BM03	Hinton Creek	3.3	EXCELLENT
BM03 BM04	_		
	Hinton Creek	3.3	EXCELLENT GOOD
BM04 LM01	Hinton Creek Sickle Creek Little Manistee (Downstream)	3.3 4.6 3.9	EXCELLENT
BM04 LM01 LM02	Hinton Creek Sickle Creek Little Manistee	3.3 4.6	EXCELLENT GOOD
BM04 LM01	Hinton Creek Sickle Creek Little Manistee (Downstream)	3.3 4.6 3.9	EXCELLENT GOOD VERY GOOD
BM04 LM01 LM02	Hinton Creek Sickle Creek Little Manistee (Downstream) Cool Creek	3.3 4.6 3.9 4.3	EXCELLENT GOOD VERY GOOD VERY GOOD

## HABITAT ASSESSMENTS:

BM01	This site has channeled a bit at transect #1 since 2016 but has stayed relatively the same depth and
	width through our sample stretch. Sand has increased in some parts of the substrate.
	This site has widened at transect #2 but has channeled at transect #3. Previous beaver dam has been
BM02	removed but flow is still stagnant in some places within the sample stretch. Odd, concentrated color
	observed in stagnant areas- specifically ones near the adjacent road crossing. Depth has remained
	comparable. The stream needs extra attention going forward as it's consistently our lowest rated
	stream. Will inspect road crossing upon next visit to determine source of degradation.
BM03	Stream width increased quite substantially at transect #1 but depth remained comparable. Substrate
	has changed most notably in transect #1 where we observed the increase in stream width- some
	areas that were dominated by sand are now a cobble/gravel mix.
	This stream has also widened quite substantially throughout sample stretch, but depth has remained
BM04	comparable.
LM01	Transect #1 could not be measured in 2021 due to treacherous conditions (flow, turbidity). Depth and
	width of this stream showed no notable changes.
LM02	Width has decreased and depth has increased overall within our 300' section. Substrate has
	remained comparable. Culvert at this location could be causing this channelization.
LM03	Only significant change was some observed erosion on left bank at transect #1 (facing upstream).
BC01	Treacherous clay conditions in portions of this site. Only observed change in stream terrain was
	erosion on right stream bank (facing upstream) at transect #2.
	Transect #3 was too deep to be sampled in 2016. Notable changes as follows: transect #3 was a
BC02	navigable depth during 2021 measurement, evidence of channelization and erosion of right bank at
	transect #2 (facing upstream).

\*1 transect equals 100 ft. There are 300 total feet (or 3 transects) assessed at each stream.