### Little Miami State Scenic River

## 2023 Volunteer Monitoring Report

Scenic Rivers Program staff and volunteers monitor the health of Ohio's 15 designated state scenic rivers annually using aquatic macroinvertebrates (or "stream bugs.") In 2023, volunteers conducted biological monitoring across Ohio, collecting a total of 396 samples at 117 locations and contributing 1,800 instream hours. This work is important to ensure that Ohio's State Scenic Rivers continue to remain healthy for future generations to enjoy.

#### Using Aquatic Macroinvertebrates to Determine Stream Health

The Ohio Scenic Rivers Program developed the Volunteer Stream Quality Monitoring Project in 1983 to encourage communities to monitor their local State Scenic River based on the presence or absence of different types of aquatic macroinvertebrates. Aquatic macroinvertebrates are organisms that lack a backbone (invertebrate), are large enough to be seen with the un-aided eye (macro) and spend a portion of their lives living in water (aquatic). Different types of aquatic macroinvertebrates have varying tolerance levels to aquatic pollution. For example, mayflies are sensitive to pollution, crayfish are somewhat sensitive to pollution and black fly larvae are tolerant of pollution. Results are used to calculate a Cumulative Index Value (CIV) score, which is ranked as excellent, good, fair or poor. Example:

Macroinvertebrate Tal	lly	Letter Codes For Approx	ter Codes For Approximate Counts of Each Taxa Type Found: 1-9=A 10-99=B 100+=C				
Sensitive Taxa	Letter	Somewhat Sensitive	Letter	Tolerant	Letter	Cumulative Index	
	Code		Code		Code	Value (CIV)	
Water Penny Larvae	A	Damselfly Nymphs	A	Black fly Larvae	В	Stream Quality	
Mayfly Nymph	В	Dragonfly Nymphs		Aquatic Worms	A	Assessment Rating	
Stonefly Nymph		Crane Fly Larvae	A	Midge Larvae	С		
Dobsonfly Larvae		Beetle Larvae	В	Pouch Snails	A	Excellent = $CIV > 22$	
Caddisfly Larvae	С	Crayfish	A	Leeches	A	Good = CIV 17-22	
Riffle Beetle Adult	В	Scuds				Fair = CIV 11-16	
Gilled Snails		Clams	A			Poor = CIV < 11	
		Sowbugs					
Number of Taxa	4	Number of Taxa	5	Number of Taxa	5	Calculated CIV:	
4x3	12	5x2	10	5 x1	5	12+10+5= 27 CIV	

#### Summary of the 2023 Monitoring Season

Overall, the Little Miami scored an average CIV of 26, which is excellent. SQM volunteers took 47 samples and contributed 249 hours of their time to gather this data. From May – October of 2023, the NW region received below average precipitation and experienced above average temperatures. Lower water conditions made monitoring challenging during times, but overall conditions were favorable. Volunteers also monitored total suspended solids or turbidity, which is caused by excess soil or organic material and can be harmful to aquatic life. In 2023, average total suspended solid measurements in Little Miami were 10 mg/L, indicating normal water quality. Overall, the 2023 season was excellent, and we thank all of those that volunteered their time for this project. We will be looking forward to seeing you again next year!

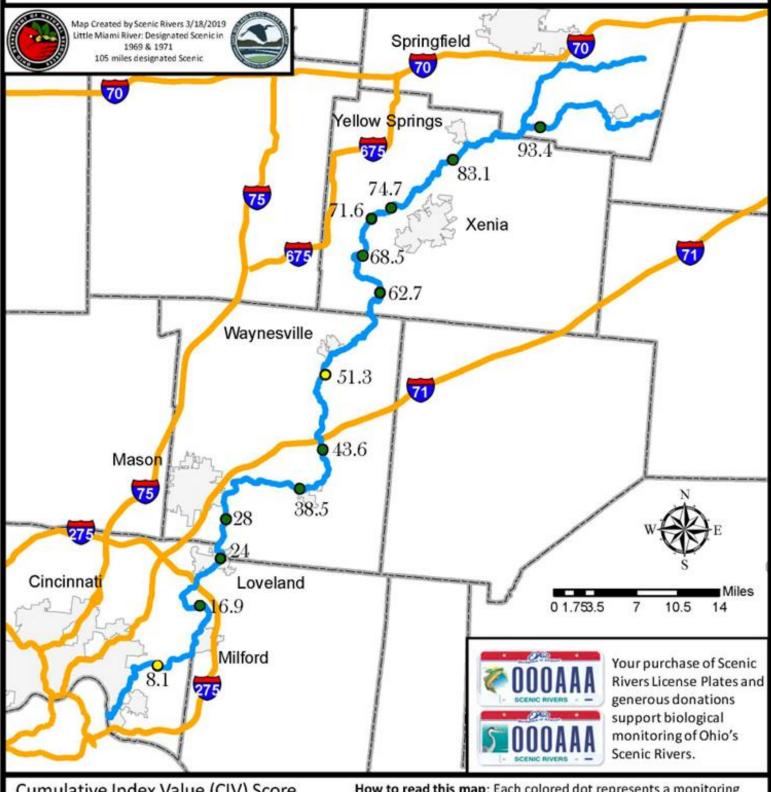
#### Thank you SQM Volunteers!

We would like to thank these Ohioans for volunteering their time to monitor the Little Miami State Scenic River in 2023: Buckeye United Fly Fishers (Tom Britton, Cari Vota, Jim Vota, Steve Alexander, Gary Begley, Tim Cassani, Jack Gormley, Dave Smith & Bryan Tudor); Sam Bell; Carly Dovale & Michael King, Don Sharp, Scott, Robyn, Aidan & Alaina Sharp, Rosmarie & James Edwards; Warren County Soil and Water Conservation District (Melissa Proffitt, Molly Conley, Seth Byerly, Sam Ciaramitaro, Emilie Fisher, Sam Kluender, Sarah Mellon, Cindy Meyer, Don Norman, Morgan Smith, Harrison Shupe), Dave & Anne Schaller; Joel & Bryan Feith; Dan, Bella & Alexander Howell; Jen Butler & Michelle Denney; Ricky Carlson; Courtney, Ben, & Rebekah Ward; Caleb & Emily Bair; Frank Campanell & Linda Hughes; Brett Halsey & Julie Scott; Chris Benner; Fred Carmack and Glenn Hubbard; Sean, Rebecca and Ian Parry & Lauren Slattery. The continued success of the Stream Quality Monitoring Project depends on the commitment and dedication of these (and past) volunteers and participants.



Learn more about the Little Miami: <a href="https://ohiodnr.gov/scenicrivers">https://ohiodnr.gov/scenicrivers</a>
Become a Volunteer: contact Bela Clutter at <a href="mailto:Bela.Clutter@dnr.ohio.gov">Bela.Clutter@dnr.ohio.gov</a>

# Little Miami State Scenic River Stream Quality Monitoring Sampling Stations



Cumulative Index Value (CIV) Score

- 11-16 Fair
- 17-22 Good
- 23-29 Excellent
- 30-42 Excellent

How to read this map: Each colored dot represents a monitoring location. The number next to the dot is the monitored river mile. The color in the dot represents the average score of all the monitoring events on that site within a given year. Example:



This monitoring location at River Mile 25.8 scored an annual average CIV between 23-29.