

Little Miami State Scenic River

2019 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 2019, over 2,900 volunteers conducted biological monitoring at 150 locations across Ohio. 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, Volunteer Stream Quality Monitoring project, developed in 1983, encourages 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 blackfly 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 Tally		Letter Codes For Approximate Counts of Each Taxa Type Found: 1-9=A 10-99=B 100+=C				
Sensitive Taxa	Letter Code	Somewhat Sensitive	Letter Code	Tolerant	Letter Code	Cumulative Index Value (CIV)
Water Penny Larvae	A	Damselfly Nymphs	A	Blackfly Larvae	B	Stream Quality Assessment Rating
Mayfly Nymph	B	Dragonfly Nymphs		Aquatic Worms	A	
Stonelfly Nymph		Crane Fly Larvae	A	Midge Larvae	C	Excellent = CIV > 22
Dobsonfly Larvae		Beetle Larvae	B	Pouch Snails	A	
Caddisfly Larvae	C	Crayfish	A	Leeches	A	Good = CIV 17-22
Riffle Beetle Adult	B	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 2019 Monitoring Season

Overall, the Little Miami scored an average CIV of 23, which is excellent. SQM volunteers and 143 additional participants contributed 282 hours of their time to gather this data. From May - October of 2019, the SW region received above average precipitation and experienced above average temperatures for most of the season. These conditions made monitoring challenging from May-October. 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 2019, average total suspended solid measurements in Little Miami was 12 mg/L, indicating normal water quality. Overall, the 2019 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 2019: Buckeye United Fly Fishers (Tom Britton, Jim & Cari Vota, Bryan Tudor, Jack Gormley, Tim & Paul Cassani, Gary & Gloria Begley, Steve Alexander), Shannon Pennington and Family, Chris & Felicia Gibson, Teresa Silvers, Becky Retzer, Linda Grinalds, Warren County Soil and Water Conservation District (Melissa Proffitt), James & Rosmarie Edwards, Adam Panstingel and Family (Little Miami River Kleeners), Teresa Peters, Lisa Price, Ruth Lapp, Bonnie Wilkinson, Ron & Sandy Kelly, Sue & Bruce Howorth, Jessica Moyer (XYLEM), Craig Moyer, James Clemmons, Mike Raulston, Jim Schengber, Rob Aders, Frank Campanell, Karen Power, Bill Schieman, Sean Parry, and Ian Parry. 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: <http://watercraft.ohiodnr.gov/littlemiamisr>

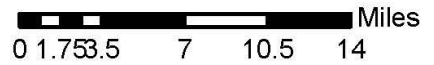
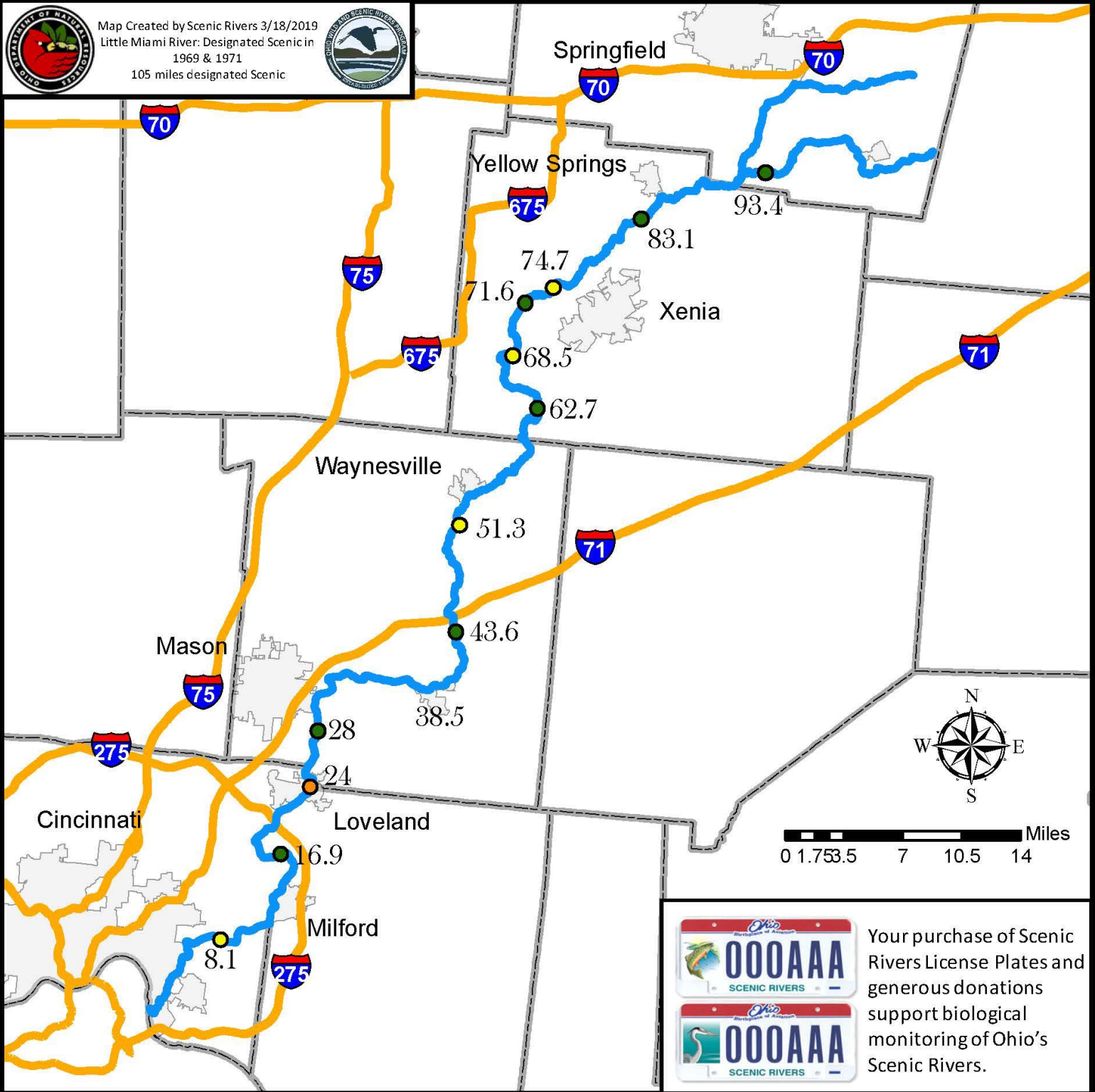
Become a Volunteer: contact 937-481-4510 or SWSOM@dnr.state.oh.us

Little Miami State Scenic River

Stream Quality Monitoring Sampling Stations



Map Created by Scenic Rivers 3/18/2019
 Little Miami River: Designated Scenic in
 1969 & 1971
 105 miles designated Scenic



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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.