

Little Miami State Scenic River

2021 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 2021, over 925 volunteers conducted biological monitoring at 136 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 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 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	Black fly Larvae	B	Stream Quality Assessment Rating
Mayfly Nymph	B	Dragonfly Nymphs		Aquatic Worms	A	
Stonefly Nymph		Crane Fly Larvae	A	Midge Larvae	C	
Dobsonfly Larvae		Beetle Larvae	B	Pouch Snails	A	Excellent = CIV > 22
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 2021 Monitoring Season

Overall, the Little Miami scored an average CIV of 26, which is excellent. SQM volunteers and 134 additional participants contributed 250 hours of their time to gather this data. From May - October of 2021, the SW region received much above average precipitation and experienced much above average temperatures for most of the season. These conditions made monitoring challenging during the months of June, August, and September. 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 2021, average total suspended solid measurements in Little Miami were 9 mg/L, indicating normal water quality. Overall, the 2021 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 2021: Shannon Pennington & Family; Jen Gillen; Chris & Felicia Gibson; Carly Dovale; Michael King; Becky Retzer; Linda Grinalds; Teresa Silvers; Warren County SWCD (Melissa Proffitt, Molly Conley, Cindy Meyer, Sam Ciaramitaro); James & Rosmarie Edwards; Little Miami River Kleeners (Adam Panstingel & Family); Dave & Anne Schaller; Bella, Alexander & Dan Howell; Jen Butler; Michelle Denney; Andy Ward; Rob Aders, Mike Raulsten Patrick Bucci; Courtney & Ben Ward; Shana Anderson; Sue & Bruce Howorth; Caleb & Emily Bair; Frank Campanell; Linda Hughes; Karen Power; Buckeye United Fly Fishers (Tom Britton, Bryan Tudor, Jim & Cari Vota, Jack Gornley, Steve Alexander, Gary & Gloria Begley, Tim Cassani). The continued success of the Stream Quality Monitoring Project depends on the commitment and dedication of these (and past) volunteers and participants.

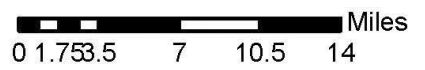
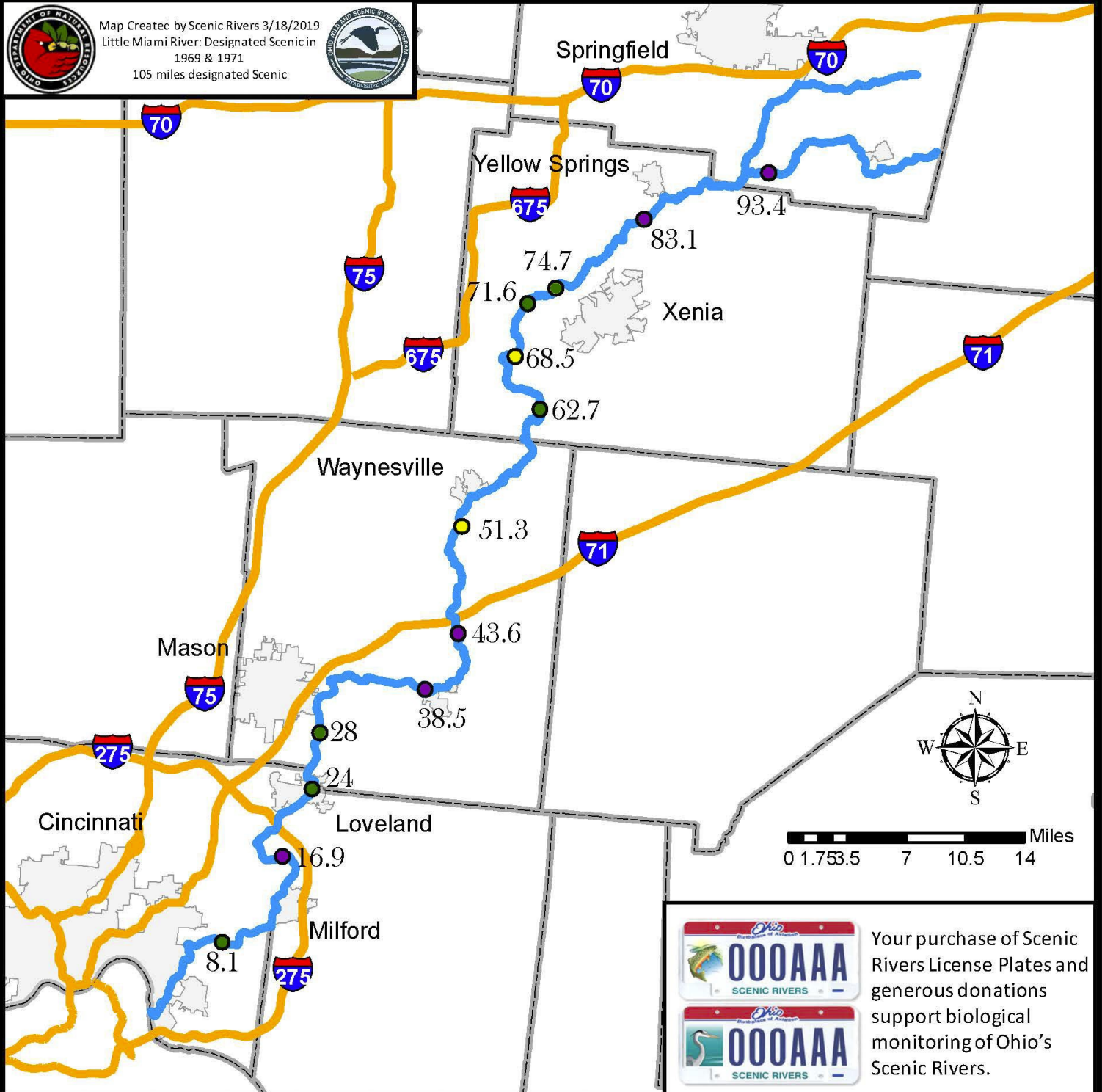
Learn more about the Little Miami: <https://ohiodnr.gov/discover-and-learn/land-water/rivers-streams-wetlands/scenic-rivers-program>

Become a Volunteer: contact 937-481-4510 or Rebecca.Parry@dnr.ohio.gov

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



Your purchase of Scenic Rivers License Plates and generous donations support biological monitoring of Ohio's Scenic Rivers.

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.