

Wisconsin Department of Natural Resources

2026 Stream Survey Report

Rocky Run Creek, Oneida County



Introduction and Objectives

Rocky Run Creek is modeled as a cool-warm mainstem system winding 10.1 miles within the Middle Tomahawk River Watershed in central Oneida County. The upper 6.7 miles of Rocky Run are designated as class two trout water indicating some reproduction, but not enough to utilize available food and space. The lower 3.4 miles has impoundments (Rocky Run Flowage) and is not designated as trout waters. The Wisconsin Department of Natural Resources (DNR) survey sought to describe the trout population characteristics, the overall condition of the system and evaluate the appropriateness of assigned trout classification in areas designated as trout water.

Watershed Information

- **Waterbody code:** 1525200
- **Stream miles:** 10.1
- **Number of Class 1 miles:** 0.0
- **Number of Class 2 miles:** 6.7
- **Number of Class 3 miles:** 0.0

Regulations

- **Category:** Green
- **Daily bag and size limit:** 5 daily bag, no minimum length

Survey Method

- Stations were sampled according to DNR wadable streams monitoring protocol.
- Trout were counted and measured. Other species were counted allowing an Index of Biotic Integrity (IBI) score to be calculated.
- Metrics describing the trout population include average length, catch per unit effort (CPUE), length frequency and species richness.
- Qualitative fish habitat rating for streams < 10 meters was used to index riparian buffer, bank erosion, pool areas, width to depth, riffle areas and the amount of sediment.

Metric Descriptions

- **Catch per unit effort (CPUE)** is a method of quantifying fish population relative abundance. For all trout surveys, CPUE is quantified as the number of a given size class of trout captured per mile of stream. CPUE indexes are compared to other trout streams throughout Wisconsin by what percentile they fall out in. For example, if a CPUE is in the 90th percentile, it is higher than 90% of the other CPUEs in the state. CPUE percentiles can also be used to categorize trout abundance as low density (<33rd percentile), moderate density (33rd - 66th percentile), high density (66th - 90th percentile) and very high density (>90th percentile).
- **Length frequency distribution** is a graphical representation of the number or percentage of fish captured by half inch or one inch size intervals.
- **Index of Biotic Integrity (IBI)** is a rating of environmental quality based on the fish assemblage. Scores of 90 - 100 indicate excellent stream quality, while scores less than 30 indicate poor stream quality. Our analysis utilizes the IBI for Wisconsin cool-warm streams.
- **Species richness** is a count of the number of unique species collected and an indication of system resiliency as more species indicates a system more capable of withstanding change or recovering from disturbance.
- **Fish Habitat rating** is a scoring of the relative quality and quantity of aquatic habitat available to support a healthy fish community. Scores of 75 - 100 indicate excellent fish habitat, while scores less than 20 indicate poor fish habitat. Our analysis utilizes the fish habitat rating for systems < 10 meters or > 10 meters depending on the mean stream width.

Table 1. Survey information from the sampling of Rocky Run in Oneida County during 2026.

Station	Below South Blue Lake Road
Survey Date	7/15/2026
Station Length (Feet)	690
Temperature (°F)	72
Mean Stream Width (Feet)	20
GPS (Start/Finish)	45.760832, -89.712773 45.7604162, -89.7105578
Gear	Stream shocker
Dippers	2
IBI	90
Qualitative Habitat Score	43

Fish Community Results

Table 2. Catch metrics by each species caught within Rocky Run during the 2026 survey.

Species	Total Number Sampled	Average Length (inches)	Length Range (inches)	Total CPUE
Bluegill	6	2.4	2.1-2.6	46.2
Brook stickleback	3	NA	NA	23.1
Brook trout	3	2.3	2.1-2.6	23.1
Common shiner	13	NA	NA	100.0
Creek chub	76	4.2	2.8-5.6	584.6
Johnny darter	30	NA	NA	230.8
Largemouth bass	1	1.9	1.9	7.7
Longnose dace	24	NA	NA	184.6
Mottled sculpin	1	NA	NA	7.7
Northern redbelly dace	17	NA	NA	130.8
Western blacknose dace	147	3.0	2.6-3.3	1130.8
White sucker	9	NA	NA	69.2

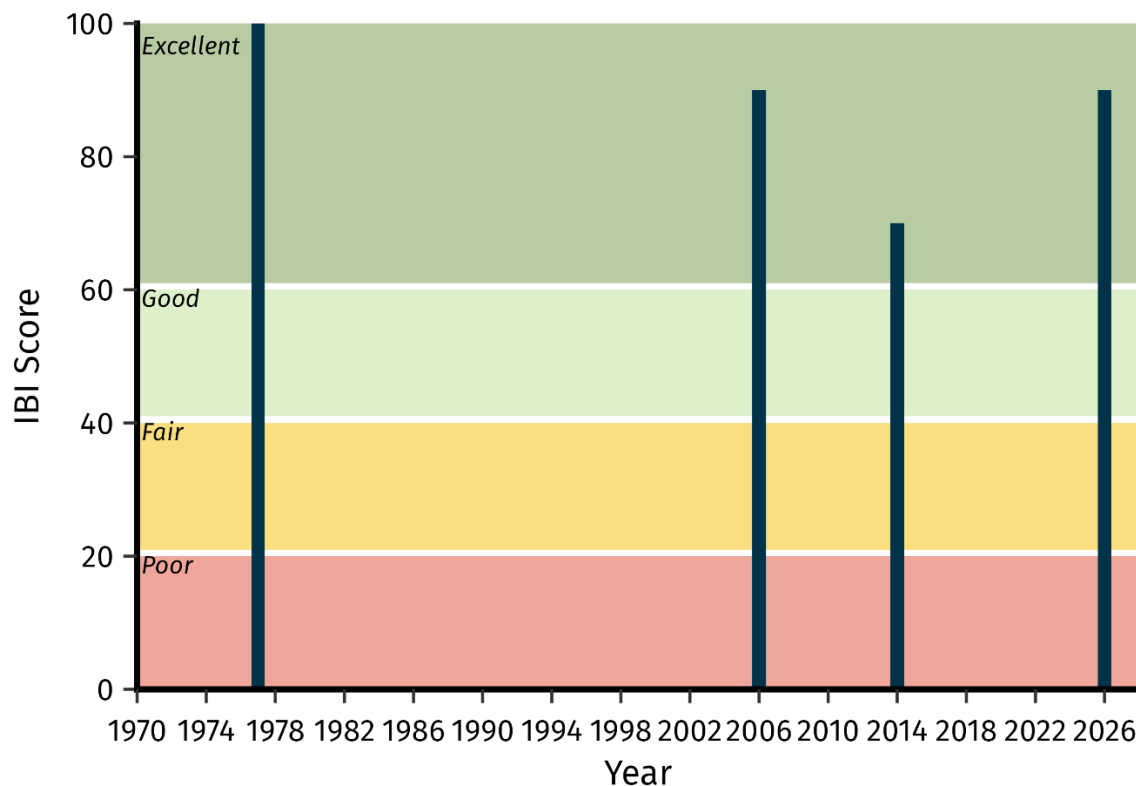


Figure 2. Index of Biotic Integrity (IBI) ratings for Rocky Run Creek across survey years at the south of Blue Lake Road monitoring station. Background shaded regions indicate the condition rating categories (e.g., Poor, Fair, Good) within cool-warm mainstem systems.

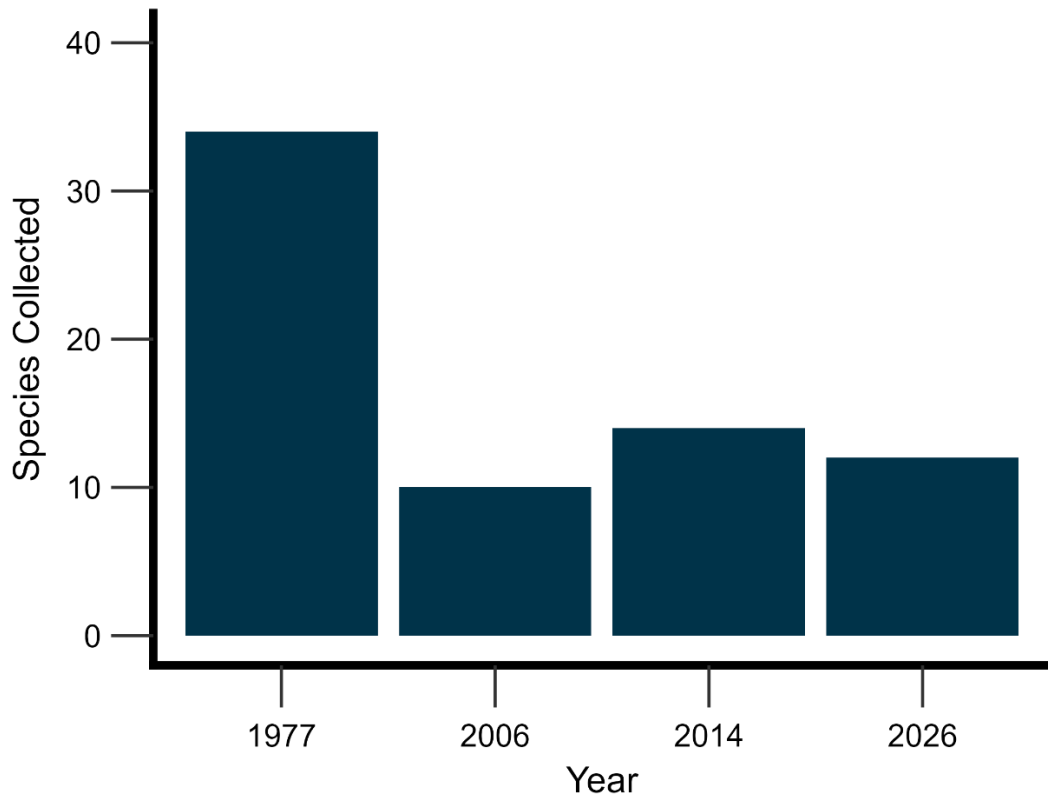


Figure 3. System-wide species richness across survey years in Rocky Run Creek. Sampling effort varied by year, with 1977 sampling nine sites throughout the system, compared to sampling limited to two stations in 2014 and one station in 2006 and 2026.

Summary

- A fish community indicative of a cool-warm mainstem system represented by coldwater, coolwater and warmwater species in excellent overall condition (90) was found during the 2026 survey of Rocky Run Creek. The quality of the fish community (IBI) was similar to what had been found in previous surveys (Figure 2).
- More species were found across 10 sites throughout the entire 10.1 miles of Rocky Run Creek during the 1977 survey compared to only stations within areas classified as trout water during the 2006, 2014 and 2026 surveys (Figure 3).
- Three brook trout (< 3 inches) were captured in the south blue lake road station for the first time since 2006 indicating continued brook trout reproduction within Rocky Run Creek. Bluegill were detected for the first time since 1977 and largemouth bass were detected for first time ever in Rocky Run Creek.

- Western blacknose dace was the most abundant fish species followed by creek chub, johnny darter, longnose dace, northern redbelly dace and common shiner.
- Rocky Run Creek had a well-buffered channel that was wide (mostly > 25 ft) and shallow (mostly < 2 ft) resulting in a fair habitat rating (43). The bottom substrate consisted primarily of sand and gravel covered by stands of emergent cattails (*Typha* spp.) and bur-reed (*Sparganium* spp.).
- Channel and habitat characteristics have remained consistent across historical surveys. The 1977 survey reported a wide (41 ft) and shallow (0.5 ft) station dominated by bur-reed as well.
- Narrowing the stream channel within Rocky Run Creek may enhance habitat suitability for trout and improve habitat quality. However, the stream is at the edge of being trout water and likely easily impacted by environmental changes and did not have noticeable angler use. Since the system is functioning as an excellent cool-warm mainstem system, habitat manipulation may not be justified from a cost-benefit perspective.
- Property access issues prevented sampling one lower station in the classified trout water section during 2026. Expanding station spatial coverage and number would offer a more comprehensive, system-wide picture of the fish community present in Rocky Run ensuring appropriate water designations, but should balance the increased labor, time and costs with data needs to ensure appropriate management.

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