Watershed at a Glance

Pipe Creek is a 48.5 square mile watershed which includes three main streams: Pipe Creek, Hemminger Ditch, and Plumbrook. The watershed is a mix of 3 landuses: Urban (41%), Agriculture (39%), and Natural (20%), that flows from Bellevue to Sandusky.

A Storm-Driven System

When it rains, it drains; and these storm events move pollutants through the watershed. When Pipe Creek's flow is low to normal, we often find little nutrient and sediment pollution. However, during and after a storm, the creek will turn light brown from sediment and often carries excess nutrients that contribute to algal blooms in Lake Erie. Storms are more intense and frequent in the spring and fall, leading to higher pollutant concentrations than in the summer.

Climate Trends in the Great Lakes

Average Temperature	Frost-free Season	Total Precipitation	Heavy Precipitation Events
2.3°F	16 Days	14%	35%
1951-2017	1951-2017	1951-2017	1951-2017

These trends are an analysis of weather observations provided by the National Oceanic and Atmospheric Administration's (NOAA) Regional Integrated Sciences and Assessment Team. While warmer temps & increased growing days benefit food production, increases in precipitation and intensity could drive more polluted run off resutling in more algal blooms.
For more information visit: glisa.umich.edu/gl-climate-factsheet-refs

Learn More & Get Involved

If you would like to explore our stream monitoring data, learn more about our coast and local watersheds, or have a passion for conservation visit the sites below by scanning the QR code.

Firelands Coastal Tribuaries Watershed

Old Woman Creek NERR

Erie Conservation District

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This publication was prepared by the Erie Soil and Water Conservation District using federal funds under the award NA24NOSX420C0044 from the National Oceanic and Atmospheric Administration, U.S. Department of Commerce through the Ohio Department of Natural Resources, Office of Coastal Management. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the National Oceanic and Atmospheric Administration, Department of Commerce, Ohio Department of Natural Resources, the Office of Coastal Management, or the Old Woman Creek National Estuarine Research Reserve.

Published:
March 2026

Connect with the Friends of Pipe Creek Watershed on Facebook to get involved with this stream.

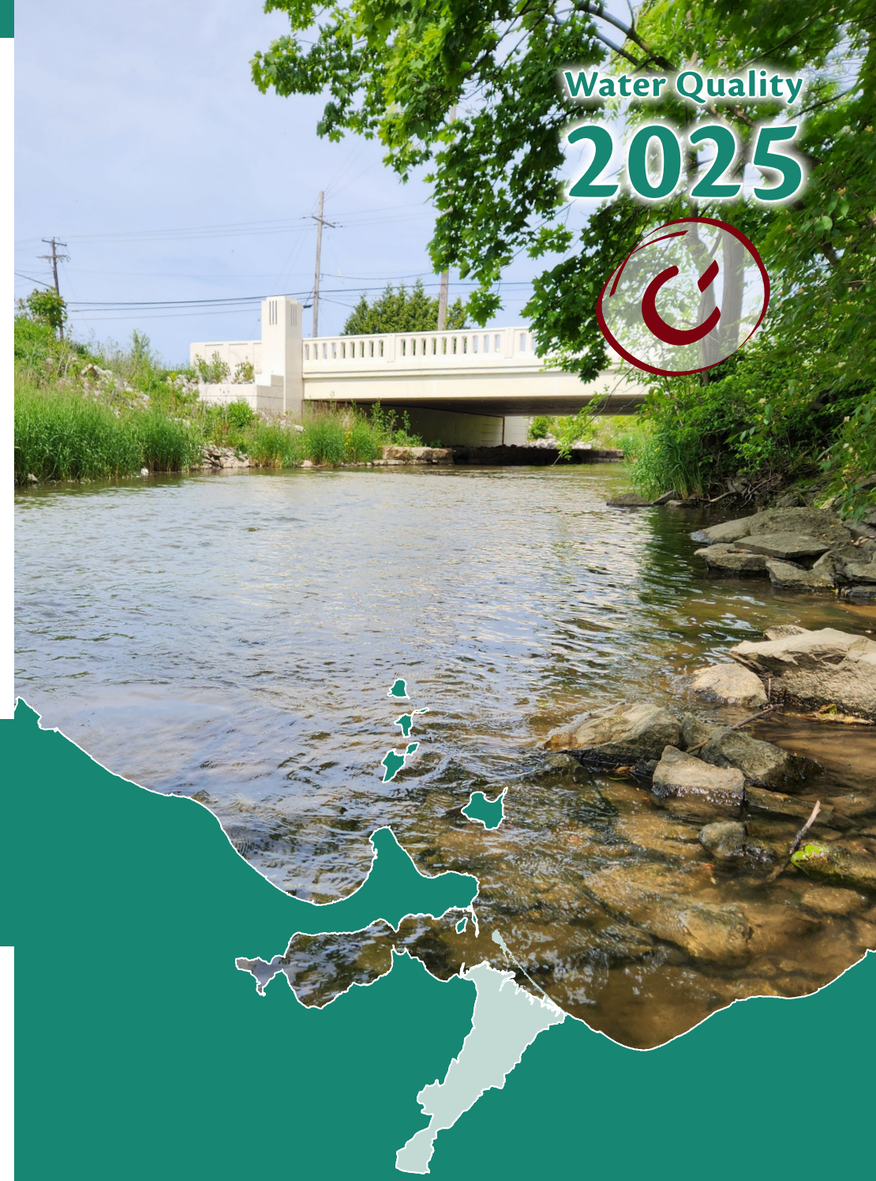


Photo Credit: Erie SWCD

Water Quality
2025

Pipe Creek
Report Card

Collecting Data

Monthly water samples were collected and analyzed by volunteers and staff from Old Woman Creek Reserve and Erie Conservation District from April through November. As well as, annual aquatic macroinvertebrate sampling and identification that is performed by staff and volunteers. These indicators are combined to develop the overall scores of individual sites and the overall watershed score. More information about our thresholds and monitoring plan can be viewed at erieconserves.org/watershed-program.

Indicators of Stream Health

Nitrogen, monitored as *nitrate*, is found in fertilizer and untreated waste. In excess, this chemical can lead to algal blooms.

Phosphorus, monitored as *soluble reactive phosphorus*, is found in fertilizer and untreated waste. In excess, this chemical can lead to algal blooms.

Turbidity is a measure of cloudiness of the water typically caused by sediment-laden runoff. Excessive sediment in the water can clog fish gills and cover macroinvertebrate habitat and fish eggs.

Benthic macroinvertebrates are aquatic organisms with no backbone that are visible to the naked eye. Some are very sensitive to pollution, making them great indicators of water health.

Vital Sign Indicators are a collective of *pH*, *temperature*, *dissolved oxygen*, and *ammonia observations*. Like our blood pressure, these parameters can identify if a serious problem is present and if one fails the whole indicator fails.

Indicator of human safety

Bacteria, measured as *E. coli*, are microorganisms commonly found in untreated waste. Many bacteria are harmful to human health and can restrict our drinking and recreational water uses.

What do these grades mean?

A	B	C	D	F
80-100% very good	60-80% good	40-60% moderate	20-40% poor	0-20% very poor

Previous Watershed Scores

In 2021, the nitrogen threshold was increased to be more consistent with aquatic response to nutrient concentration.

Indicator	2017	2018	2019	**2020**	2021	2022	**2023**	2024
Nitrate	D	C-	C	B	C	C+	B	B
SR Phosphorus	D	D	C	D	C+	C-	F	F
Turbidity	C	D+	C-	C	B-	C	C-	C-
Benthic Macroinvertebrate	C	C+	C+	C	B-	C	B-	B-

Weather During our Sampling Period

Rainfall from April through July was at or above the 30-year average, with nearly 6 inches recorded in July. Although most fall months were below average, the higher spring and summer precipitation led to two sampled storm events.

16 Number of days with rainfall totals greater than 3/4"

2 Number of sampling events impacted by storms (June & October)

1.87 Largest storm event: Total inches that fell in 48 hour period occurred in late July

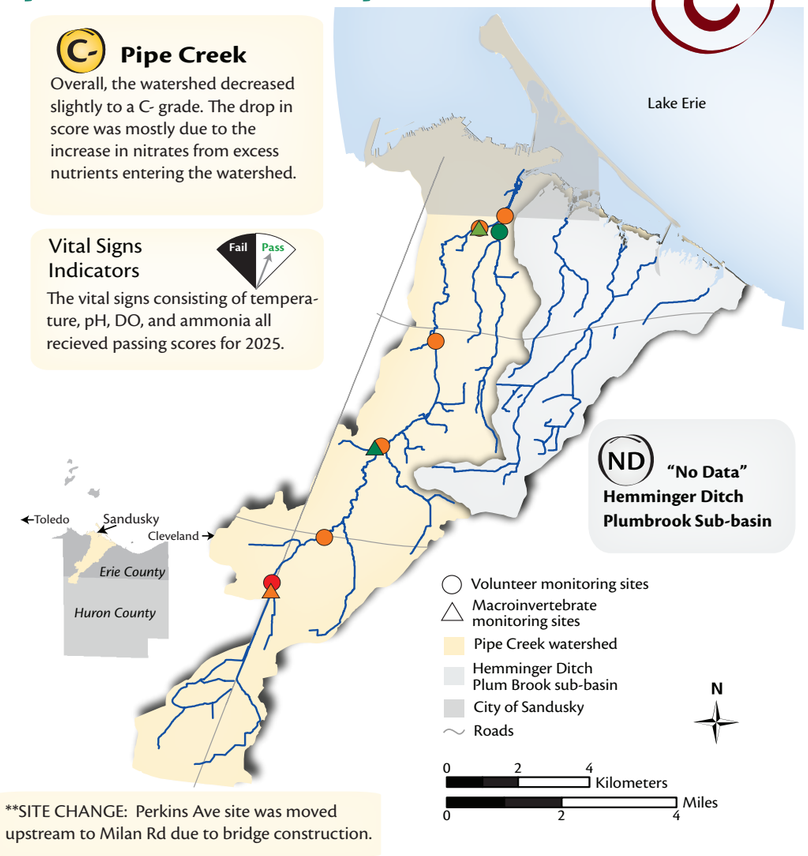
Pipe Creek 2025 Report Card

C- Pipe Creek

Overall, the watershed decreased slightly to a C- grade. The drop in score was mostly due to the increase in nitrates from excess nutrients entering the watershed.

Vital Signs Indicators — Fail / Pass

The vital signs consisting of temperature, pH, DO, and ammonia all recieved passing scores for 2025.



**SITE CHANGE: Perkins Ave site was moved upstream to Milan Rd due to bridge construction.

Creek Site Water Quality Scores

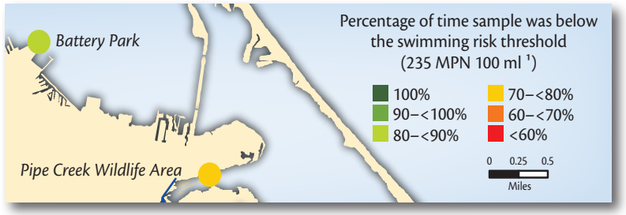
Strecker Rd	Portland Rd	Patten Tract	Bogart Rd	Columbus Ave	Oakland Ave	Perkins Ave	
F	D+	D	D	D-	A	D	Lake Erie

Sites are listed from headwaters (south) to mouth (north).

2025 Beach Health and Safety

Two Pipe Creek shoreline sites are monitored for bacteria by the Erie County Health Department. During the 2025 swimming season, Battery Park had advisories on 15 of 76 sampled days (20%), while Pipe Creek Wildlife Area had advisories on 39 of 100 days (39%), indicating a risk of illness from water contact on about one-fifth and two-fifths of the season, respectively.

Note that the bacteria scoring scale is more stringent than water quality indicators because of the high variability and importance to human health and safety.



Join the Friends and Help the Creek

"Friends Groups" are volunteer groups made up of community members who share a common goal and support local natural resources through meetings, education, and hands-on stewardship. In the Firelands Coastal Tributaries Watersheds, two groups are active: the Friends of Old Woman Creek and the Friends of Pipe Creek Watershed.

The Friends of Pipe Creek formed in 2006 in response to flooding concerns but has since grown into an active volunteer group focused on improving stream health, recreation, and flood resilience. Many members serve as stream monitors, helping collect data for watershed report cards. They have also gathered infrastructure data, advocated for flood-reduction improvements, and funded educational signage at stream crossings to raise awareness about Pipe Creek in the community.

The group is also known for its hands-on work. Since its founding, volunteers have removed thousands of pounds of trash from Pipe Creek between Route 250 and the Cedar Point Causeway—including more than 20 shopping carts, several tires, and even a couch!

In 2026, the Friends of Pipe Creek plan to host monthly volunteer events from April through October. To learn more, visit their Facebook page or contact the Erie Conservation District.

Be the Solution!

In 2010, after being assessed by the Ohio Environmental Protection Agency, Pipe Creek was placed on the "303d list" for impaired waters of the United States of America. In order to get off this impairment list, we need to greatly reduce the sediment, nutrients, and bacteria degrading our stream. These pollutants come from both the urban and agricultural areas, so it will take all of us to improve Pipe Creek! Below are a few key ways you can help.

Farmer

Follow the 4R's of fertilizer use: **R**ight source, **R**ight amount, **R**ight place, **R**ight time.

Plant vegetative buffers along streams and ditches.

Don't leave your field bare. Reduce tillage & plant cover crops!

Homeowner & Community

Inspect and pump out your septic system every 3-5 years.

Promote the use of MORE green infrastructure in your community.

Plant a rain garden or install a rain barrel at home.