Western Lake Erie HAB Seasonal Assessment

2026-11-19

Summary: The 2026 western Lake Erie cyanobacterial bloom had a severity index (SI) of 3.4, which is considered a moderate bloom. The 2026 severity was consistent with the seasonal forecast (issued: 25 June 2026) which predicted a severity of 3.5 (range: 3-4.5). The seasonal forecast uses an ensemble of different statistical models, each of which includes Maumee River phosphorus loading into the western basin during the spring and early summer (March-July) to predict upcoming summer cyanobacterial bloom severity. The annual SI is determined from the three 10-day composite satellite images with the maximum amount of cyanobacterial biomass.

The *Microcystis* bloom first began in Maumee Bay around July 12 and was slow to expand in both bloom biomass and area, similar to 2025. The bloom did not fully establish until early to mid August, and reached peak biomass and area in mid-September. The bloom intensity reduced rapidly in mid October, due to elevated winds and cloud cover, before lingering at relatively low concentrations through November. Through the season, the bloom stayed close to the U.S. coast, primarily from Stony Point, MI to Port Clinton, OH, with highest concentrations observed in and extending from Maumee Bay. Parts of the bloom were observed off the Canadian coast near Leamington, ON starting in early October, and wrapped east and south of Pelee Island, ON in late October.

Overall, the bloom in 2026 (SI of 3.4) was more intense than in 2025 (SI of 2.4). The 2026 peak bloom area, however, was smaller than the relatively low density 2025 bloom (339 vs. 411 square miles, respectively). In the last decade, the 2026 bloom was most similar in overall severity to 2021 (SI of 3.4; average peak bloom area of 607 square miles), but had a smaller average bloom area at the peak. Maumee River cumulative total bioavailable phosphorus (TBP) loads were similar in 2024 and 2026, but the bloom in 2026 was smaller and less severe than 2024 (SI of 4.2; average peak bloom area of 626 square miles).

Bloom Severity

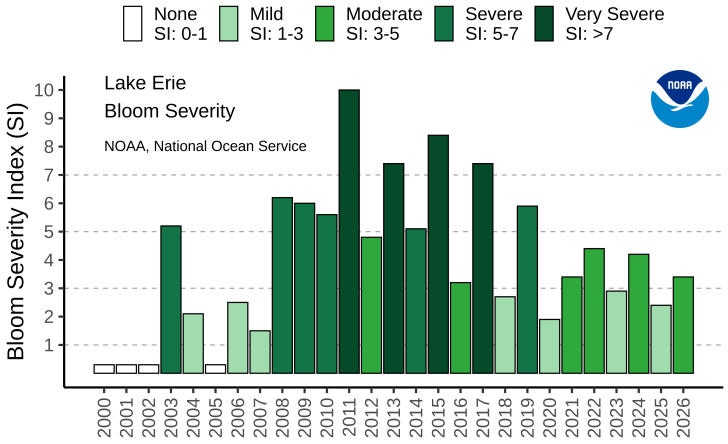


Fig. 1. Bloom severity index (SI) for 2000-2026. The SI is based on satellite imagery used to identify the amount of cyanobacterial biomass over the three 10-day composites with the greatest biomass. The 2026 bloom had a severity of 3.4, which is considered a moderate bloom.

Cumulative Total Bioavailable Phosphorus

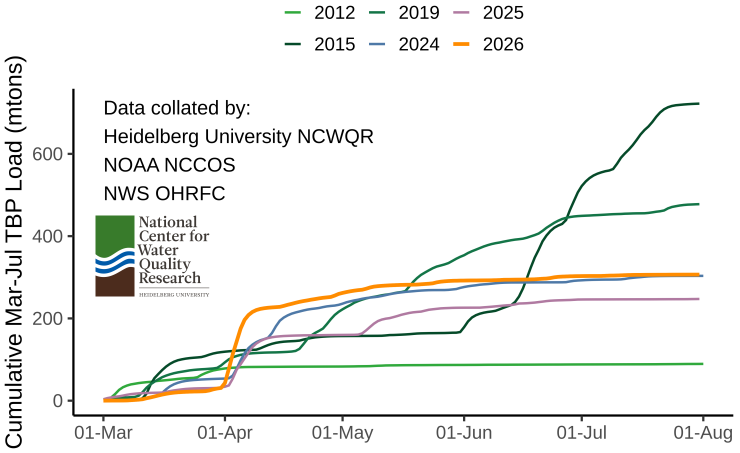


Fig. 2. Cumulative total bioavailable phosphorus (TBP) loads for the Maumee River (Waterville, OH). Each line denotes cumulative load for different years. 2026 is in orange.

Total Bioavailable Phosphorus

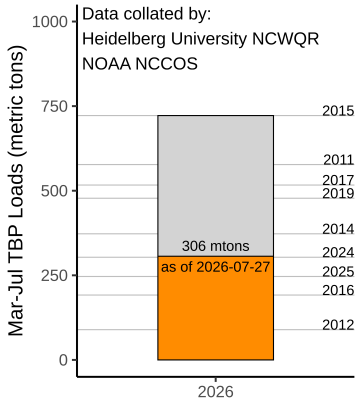


Fig. 3. Total bioavailable phosphorus (TBP) load accumulated from the Maumee River near Waterville, OH through the spring loading period (March-July). The right axis denotes the TBP load from selected previous years.

Comparative Bloom Severity

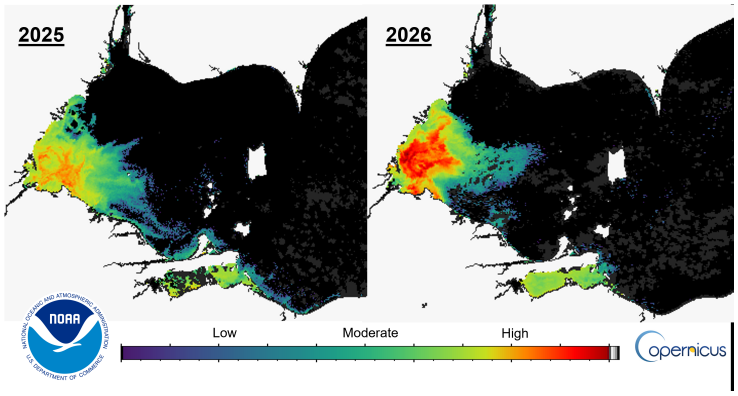


Fig. 4. The 10-day maximum bloom severity in 2025 (Aug. 19-28) and in 2026 (Sep. 8-17). Bluish-green to dark blue indicates low cyanobacterial concentrations.

For more information visit: coastalscience.noaa.gov/science-areas/habs/hab-forecasts/lake-erie or ncwqr.org

Questions? Contact: hab@noaa.gov

1305 East West Hwy, Rm 8110
Silver Spring, Maryland 20910
coastalscience.noaa.gov
noaacoastalsci | noaa.coastal.sci