Lake Erie Harmful Algal Bloom Forecast

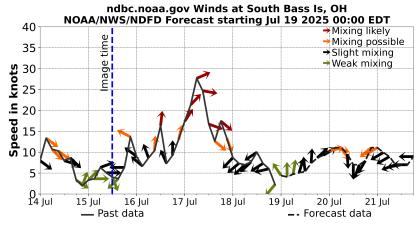
Summary

The cyanobacteria bloom in western Lake Erie has an approximate area of 20 square miles, which is an increase in area since Jul 10. Clouds have persisted over western Lake Erie for the past several days. Satellite imagery on July 15, 2025 shows patches of cyanobacteria in North Maumee Bay near Erie, MI in far western Lake Erie. Sandusky Bay has a local, widespread bloom of mixed cyanobacteria. Toxins have been detected in Sandusky Bay and can exceed the recreational limit (8 ug/L microcystin) in scums and discolored (green) water. Toxins have been detected below the recreational limit in western Lake Erie. They can be highly concentrated in scums! If you see scum, keep your pets and yourself out of the water. In the satellite imagery or bloom forecast position products, any areas that are orange or red are likely to have scum, especially during calm winds, see Mixing Forecast product. -- Tomlinson and St. Laurent 07/18/2025

The past few days of imagery can be seen at the HAB monitoring site. The Lake Erie Forecast is operated by the National Centers for Coastal Ocean Science. Contact hab@noaa.gov for technical Questions. Last Updated: 2025-07-18 11 PM EST

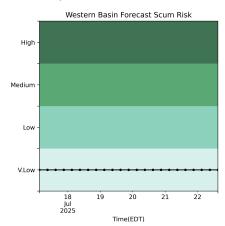


Current Lake Erie Sentinel-3 satellite imagery from the Ocean and Land Color Imager (OLCI) on Jul 15, 2025, showing bloom location and extent in the western basin. Grey indicates clouds or missing data. The estimated threshold of cyanobacteria detection is 20,000 cells/mL. Inset shows a truecolor image of the entire lake. Data derived from Copernicus Sentinel-3.



Wind speed and direction from SouthBassIs, OH. Blooms mix through water column at wind speeds > 15 knots.



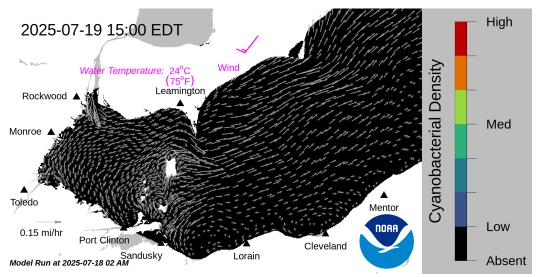


Where the bloom is present in western Lake Erie, the potential risk of scum.

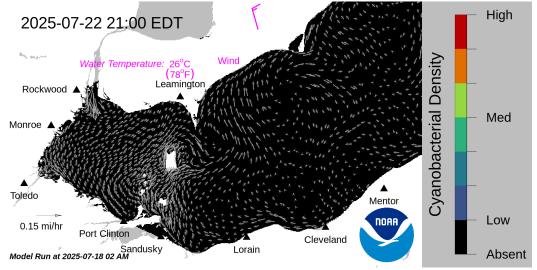
> 1305 East West Hwy, Rm 8110 Silver Spring, Maryland 20910 coastalscience.noaa.gov

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2025-07-18



Forecast surface bloom position for Jul 19, modeled from the last satellite image with water currents estimated from the Lake Erie Operational Forecast System (LEOFS). Potential for bloom movement is forecast in 3-dimensions with a hydrodynamic model using satellite imagery and currents. The modeled output does not contain clouds. Black indicates the absence of chlorophyll and gray indicates area with no data. The arrows show forecasted currents. Water temperature and winds (in magenta) are the averages for the western basin from the model.



Forecast surface bloom position for Jul 22. Black indicates the absence of chlorophyll and gray indicates area with no data. The arrows show forecasted currents. Water temperature and winds (in magenta) are the averages for the western basin from the model.

Additional resources:

For more information visit: coastaiscience.noaa.gov/science-areas/nabs/nab-iorecasts/lake-ene/