

## Lake Erie Harmful Algal Bloom Forecast

2024-07-20

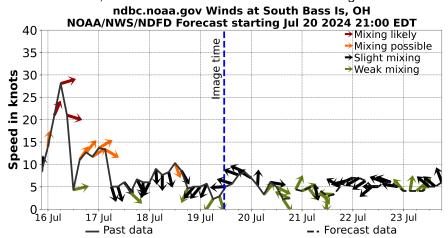
## **Summary**

The cyanobacteria bloom in western Lake Erie has an approximate area of 140 square miles, which is a decrease in area since Jul 13. The *Microcystis* bloom extends from Maumee Bay north to Pointe Mouillee State Game Area, MI and to the south to Magee Marsh Wildlife Area, OH and into the western basin towards West Sister Island. Sandusky Bay has a local bloom of mixed cyanobacteria. Toxins have been detected above the recreational limit. 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. --NCCOS HAB Forecasting Team 19 July 2024

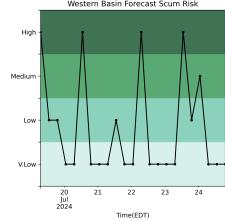
The past few days of imagery can be seen at the HAB monitoring site. The Lake Erie Forecast is operated by the National Centers for Coastal Ocean Science. Contact hab@noaa.gov for technical Questions. Last Updated: 2024-07-20 09 PM EST



Current Lake Erie Sentinel-3 satellite imagery from the Ocean and Land Color Imager (OLCI) on Jul 19, 2024, 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 Control 2



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.

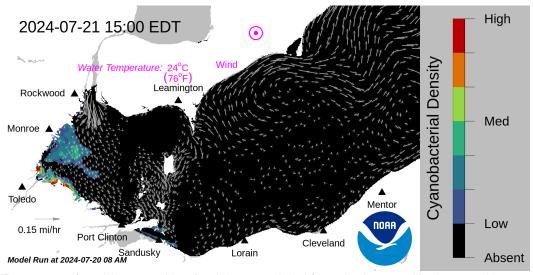
For more information visit: coastalscience.noaa.gov/science-areas/habs/hab-forecasts/lake-erie/



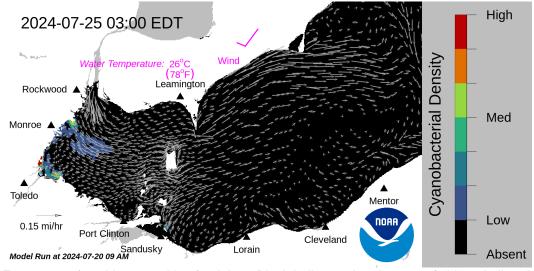


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Forecast surface bloom position for Jul 21, modeled from the last satellite image with water currents estimated from the Lake Erie Operational Forecast System (LEOFS). Potential for bloom movement is forecast in 3-dimensions with a hydrodynamic model 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 24. 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:**

- Archived Lake Erie Forecasts
- More information about our bloom monitoring imagery
  - FAQs Frequently Asked Questions about cyanobacteria and the forecasts NOAA issues
- Contributors and Data Providers
  - Lake Erie HAB Forecast Guide User guide to help navigate the forecast products
- Lake Erie Hypoxia Forecast

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

