

Lake Erie Harmful Algal Bloom Forecast

2024-10-03

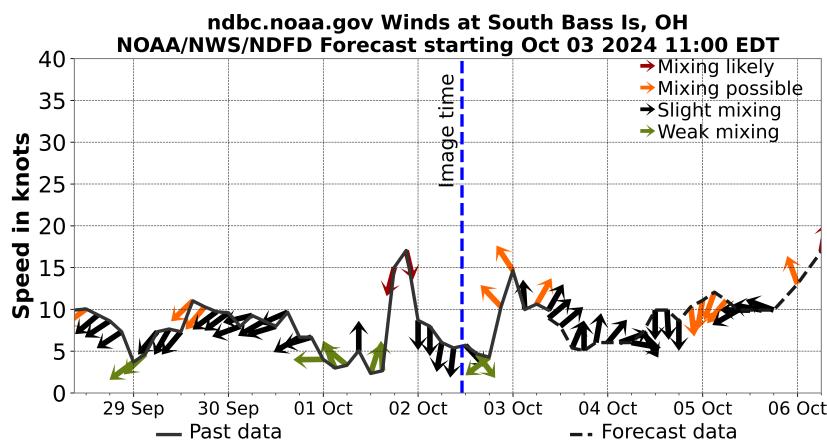
Summary

The cyanobacteria bloom in western Lake Erie has an approximate area of 60 square miles, which is an increase in area since Oct 02. The *Microcystis* bloom is present in western Lake Erie, but at reduced concentrations as compared to mid-September, likely due to wind-driven water column mixing and sediment resuspension. As of October 2nd, the bloom extended from Monroe, MI to Cedar Point National Wildlife Refuge, OH. Sandusky Bay continues to have a local bloom of mixed cyanobacteria. Toxins have been detected below 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 3 October 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: 2024-10-03 09 PM EST

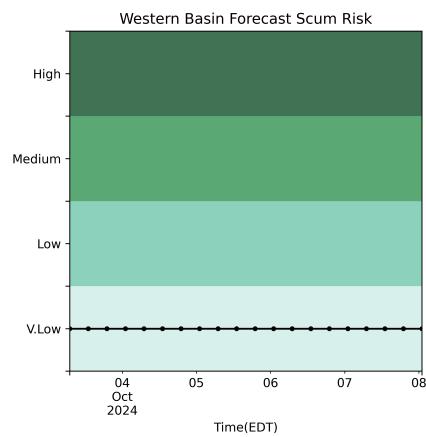


Current Lake Erie Sentinel-3 satellite imagery from the Ocean and Land Color Imager (OLCI) on Oct 03, 2024, showing bloom location and extent in the western basin. Grey indicates clouds or missing data. The estimated threshold of cyanobacteria detection is 20,000 cells/mL. Inset shows a truecolor image of the entire lake. Data derived from Copernicus Sentinel-3.



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

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



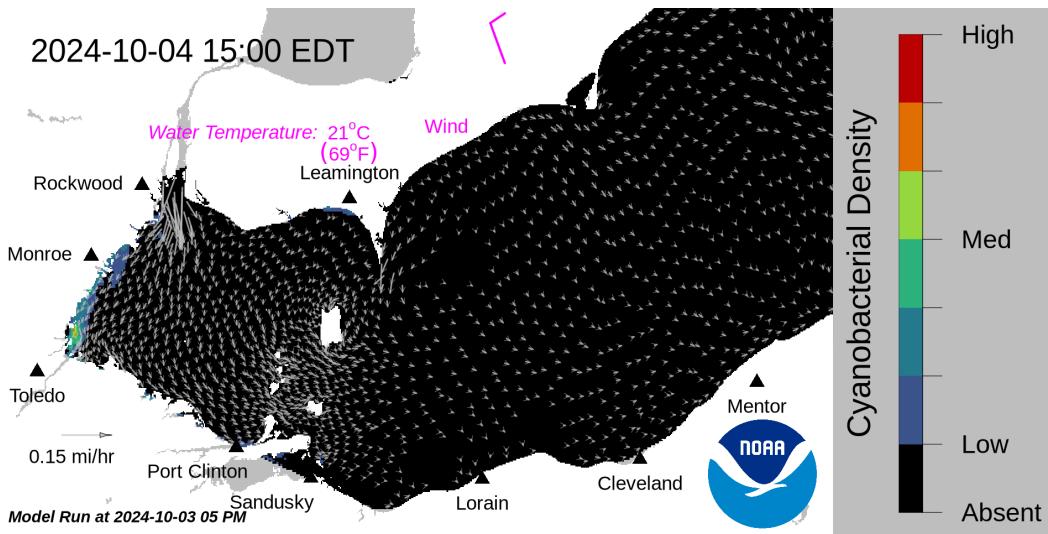
Where the bloom is present in western Lake Erie, the potential risk of scum.

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Silver Spring, Maryland 20910
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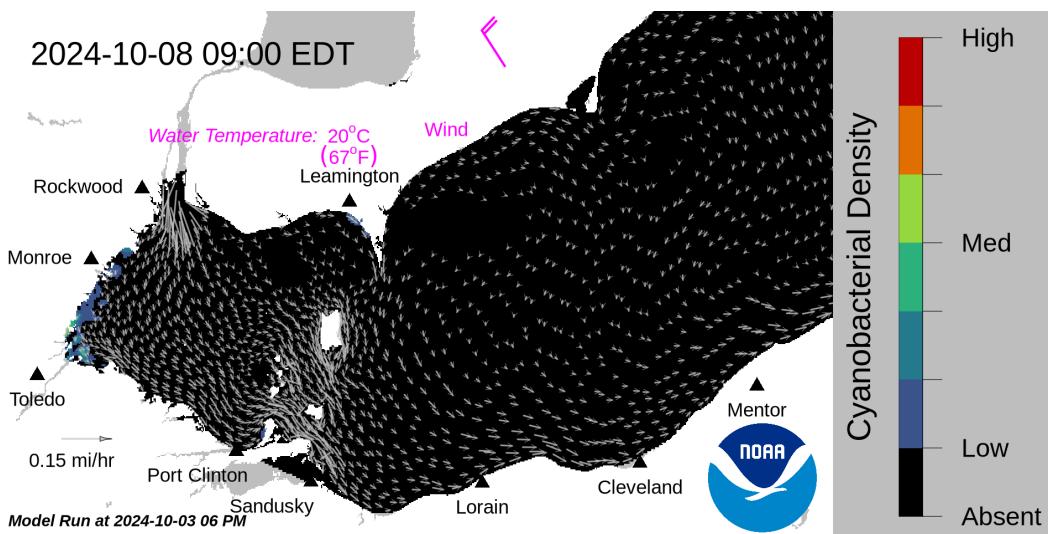
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Forecast surface bloom position for Oct 04, modeled from the last satellite image with water currents estimated from the Lake Erie Operational Forecast System (LEOFS). Potential for bloom movement is forecast in 3-dimensions with a hydrodynamic model 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 Oct 08. 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/



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