

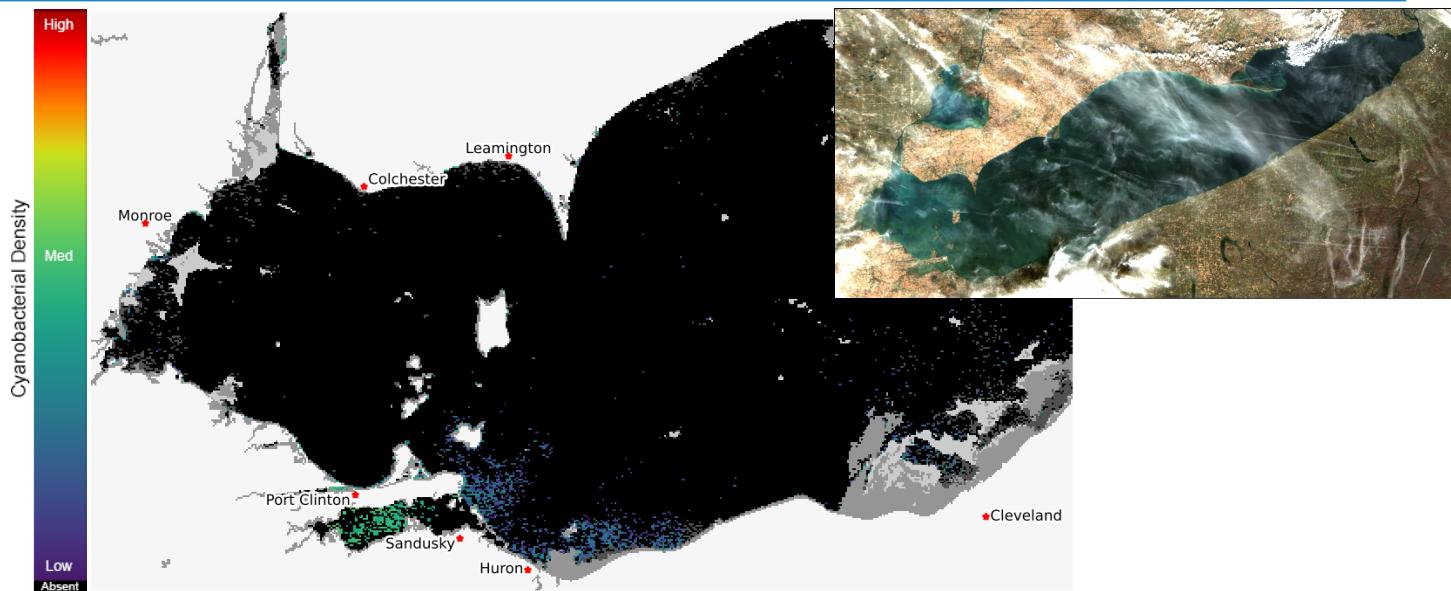
Lake Erie Harmful Algal Bloom Forecast

2024-11-01

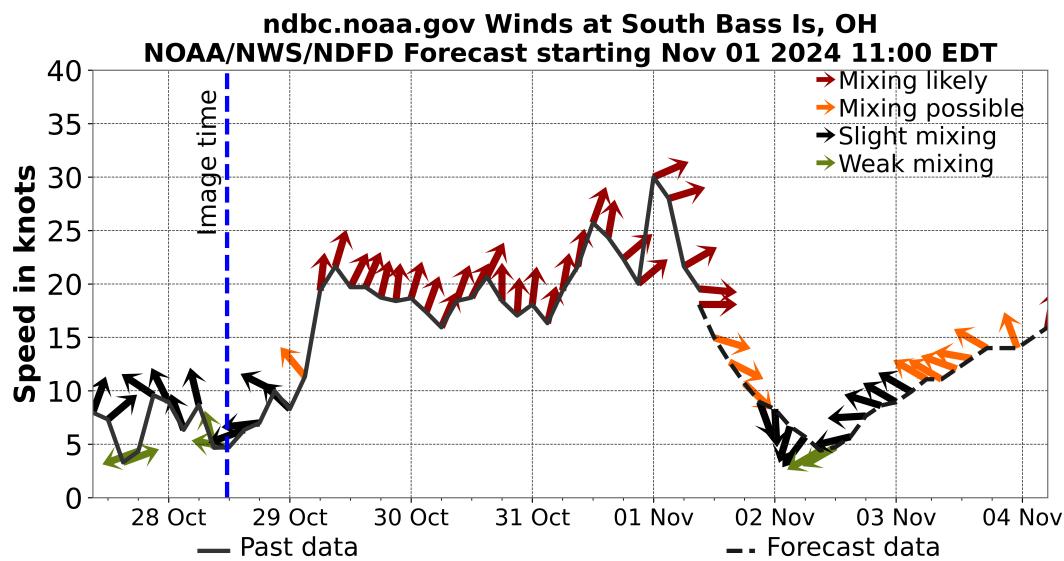
Summary

The cyanobacteria bloom in western Lake Erie has an approximate area of 20 square miles, which is a decrease in area since Oct 22. Cooler temperatures and breezy conditions have substantially reduced the western Lake Erie *Microcystis* bloom over the past several weeks. We will continue to monitor conditions using satellite imagery and NOAA GLERL weekly cell count and toxin data. No toxins have been detected. --NCCOS HAB Forecasting Team 28 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: 2024-11-01 09 PM EST

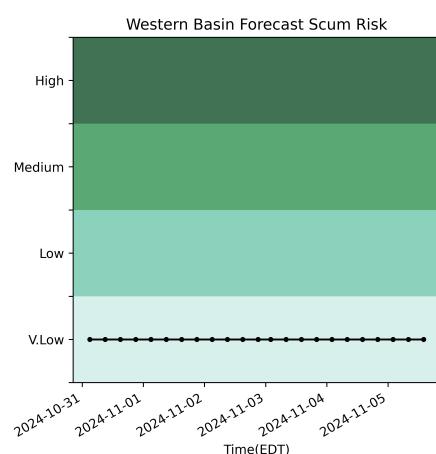


Current Lake Erie Sentinel-3 satellite imagery from the Ocean and Land Color Imager (OLCI) on Oct 28, 2024, showing bloom location and extent in the western basin. Grey indicates clouds or missing data. The estimated threshold of cyanobacteria detection is 20,000 cells/mL. Inset shows a truecolor image 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.

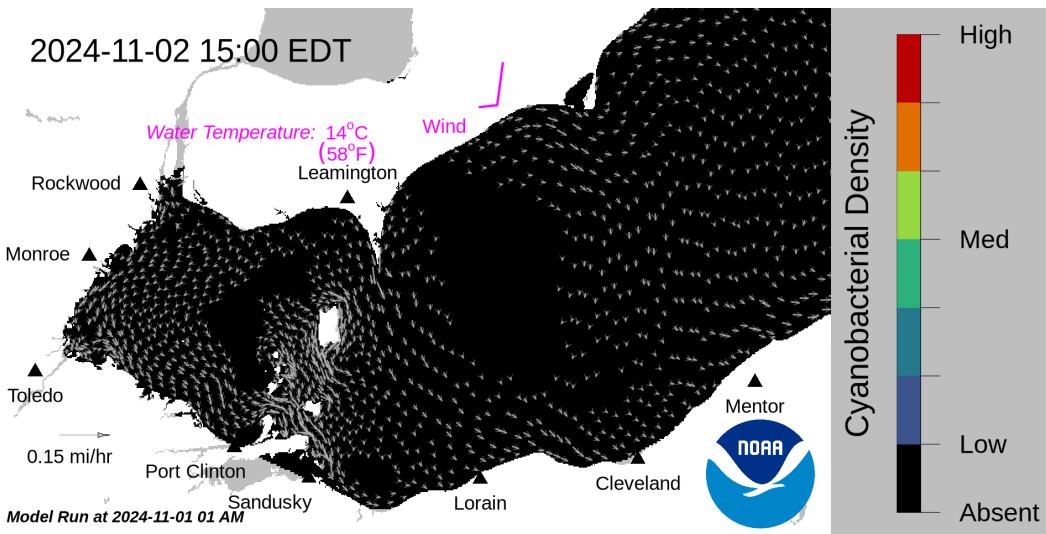
For more information visit: coastalscience.noaa.gov/science-areas/habs/hab-forecasts/lake-erie/



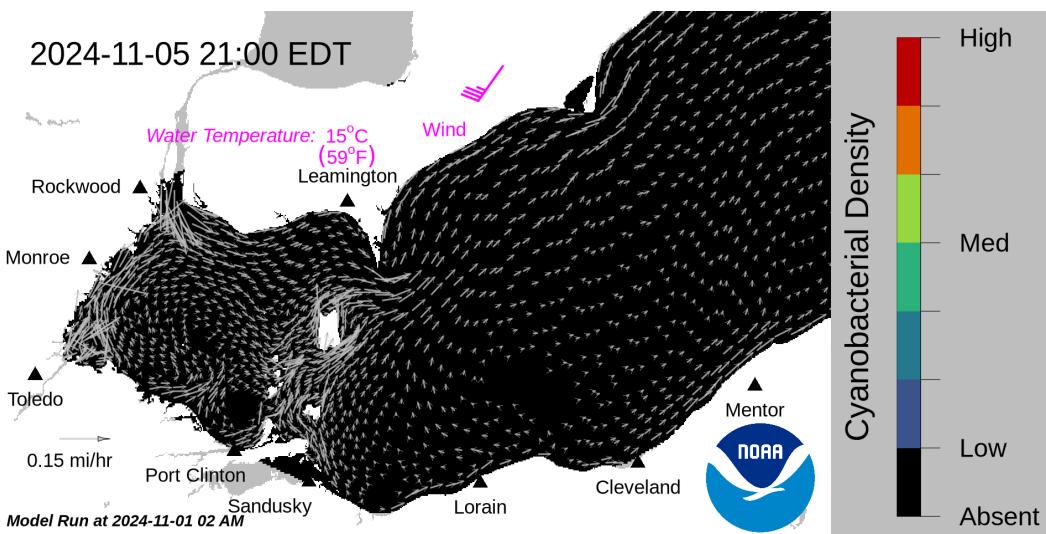
Where the bloom is present in western Lake Erie, the potential risk of scum.

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Forecast surface bloom position for Nov 02, 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 Nov 05. 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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