



# Lake Erie Harmful Algal Bloom Bulletin

29 June, 2018, Bulletin 03

## Analysis

Cyanobacteria is present in Lake Erie at low concentrations. *Microcystis* is present in the Maumee Bay area of the western basin. Recent satellite imagery (6/28) indicates detectable concentrations in Maumee Bay, alongshore the Ohio Coast east of Maumee Bay, and offshore from North Maumee Bay to Brest Bay, extending past West Sister Island. *Keep pets and yourself out of the water where scum is forming*. Measured toxin concentrations are still below recreational thresholds throughout the bloom extent. The persistent cyanobacteria bloom in Sandusky Bay continues, now present outside the bay, extending west along the Ohio coast. No other blooms are present in Lake Erie.

## Forecasts

Today's winds (1-6 kn) will increase the potential for scum formation. Winds forecast (9-13 kn) Saturday through Monday (6/30-7/2) will increase the potential for mixing of *Microcystis* and promote easterly transport of *Microcystis* today through Monday (6/29-7/2).  
-Ludema, Keeney

## Additional Resources

To find a safe place for recreation, visit the Ohio DOH "BeachGuard" site: <http://publicapps.odh.ohio.gov/beachguardpublic/>  
Ohio EPA's site on harmful algal blooms: <http://epa.ohio.gov/HAB-Algae>  
NOAA's GLERL provides additional HAB data here: [http://www.glerl.noaa.gov/res/HABs\\_and\\_Hypoxia](http://www.glerl.noaa.gov/res/HABs_and_Hypoxia)

The images below are "GeoPDF". Please visit <https://go.usa.gov/xReTC> for instructions on viewing longitude and latitude.

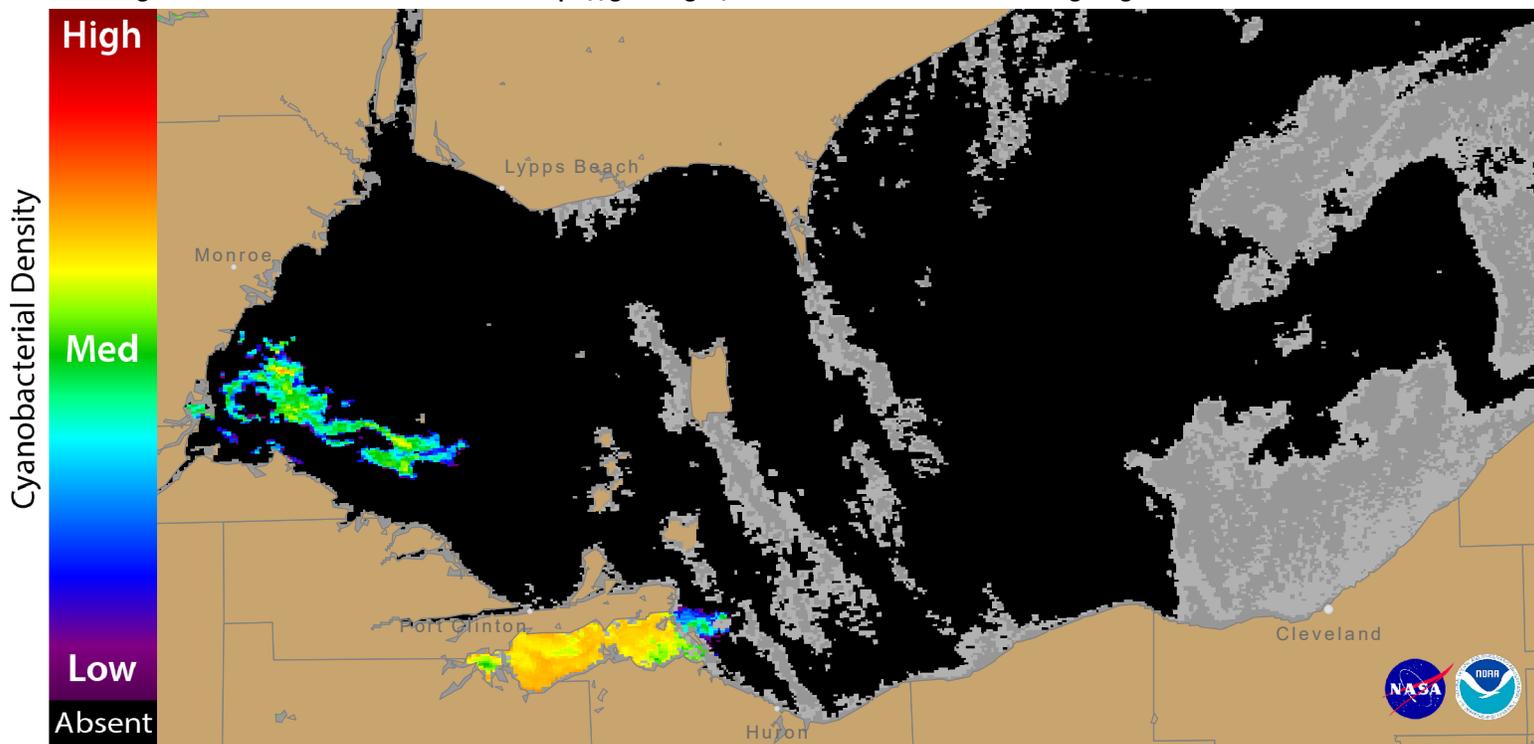


Figure 1. Cyanobacterial Index from modified Copernicus Sentinel 3 data collected 28 June, 2018 at 11:23 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/ml

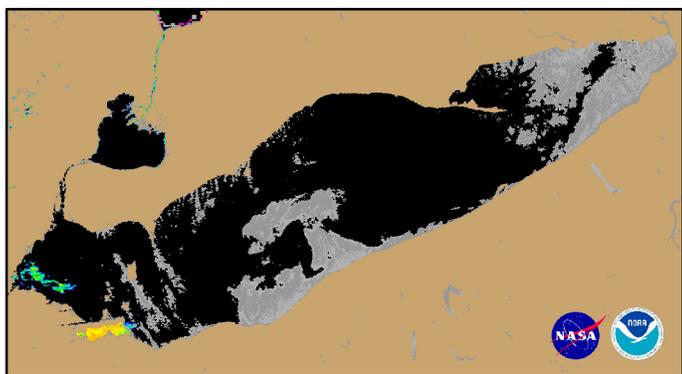
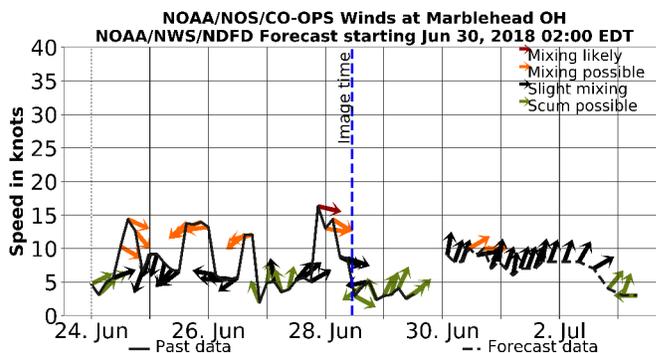


Figure 2. Cyanobacterial Index from modified Copernicus Sentinel 3 data collected 28 June, 2018 at 11:23.



Wind speed and direction from Marblehead, OH. Blooms mix through the water column at wind speeds greater than 15 knots (or 7.7 m/s).

For more information and to subscribe to this bulletin, go to: <https://tidesandcurrents.noaa.gov/hab/lakeerie.html>

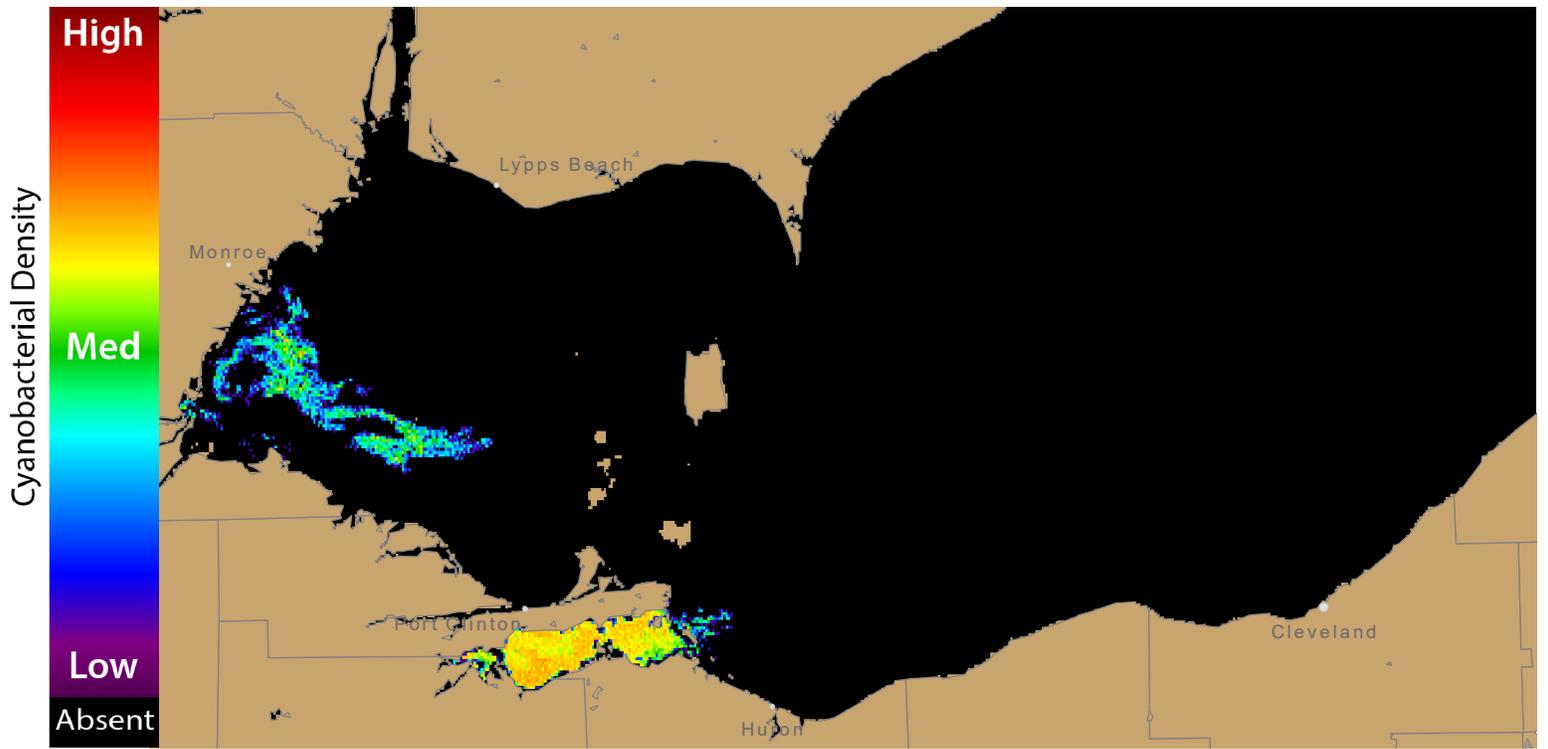


Figure 3. Nowcast position of bloom for 29 June, 2018 using GLFS modelled currents to move the bloom from the 28 June, 2018 image.

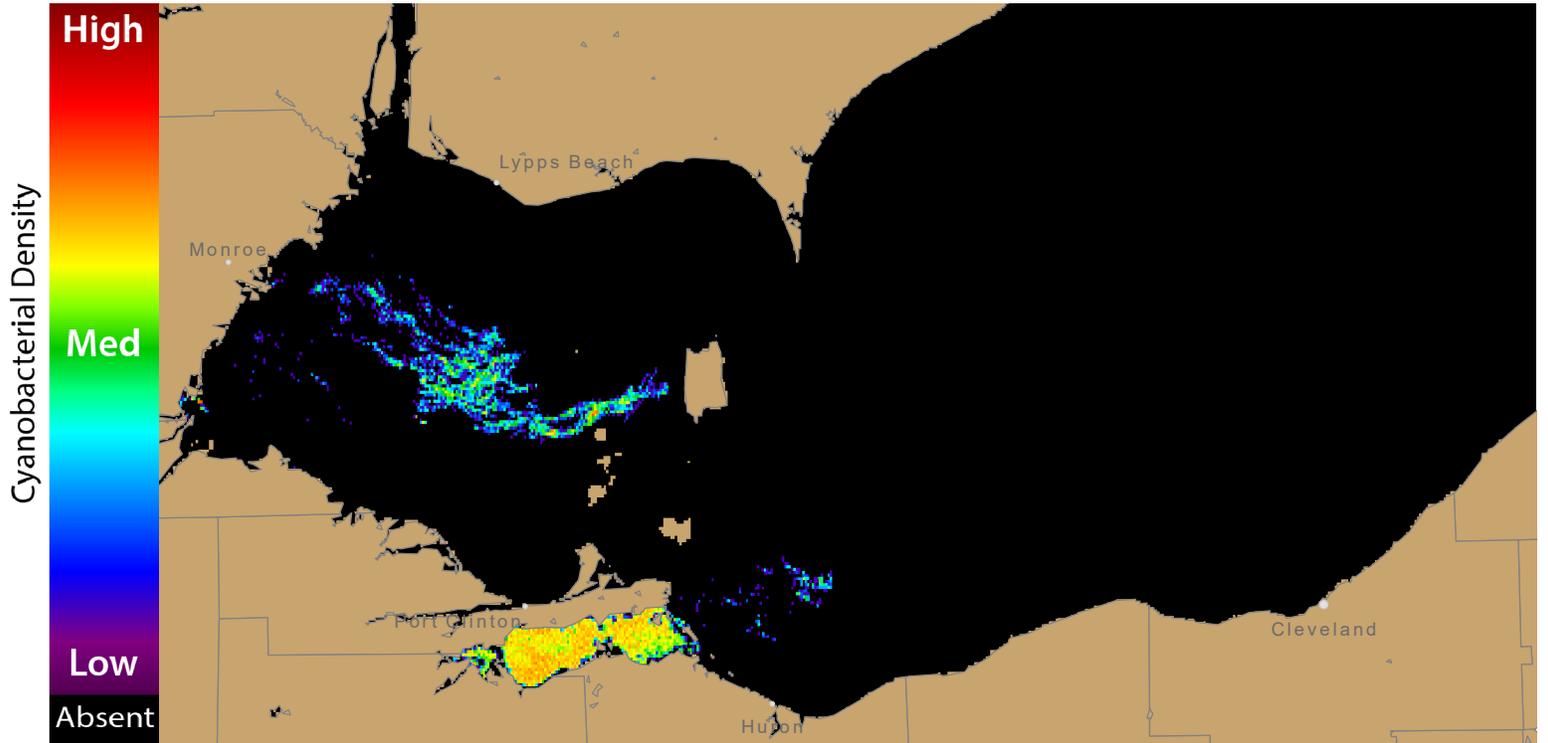
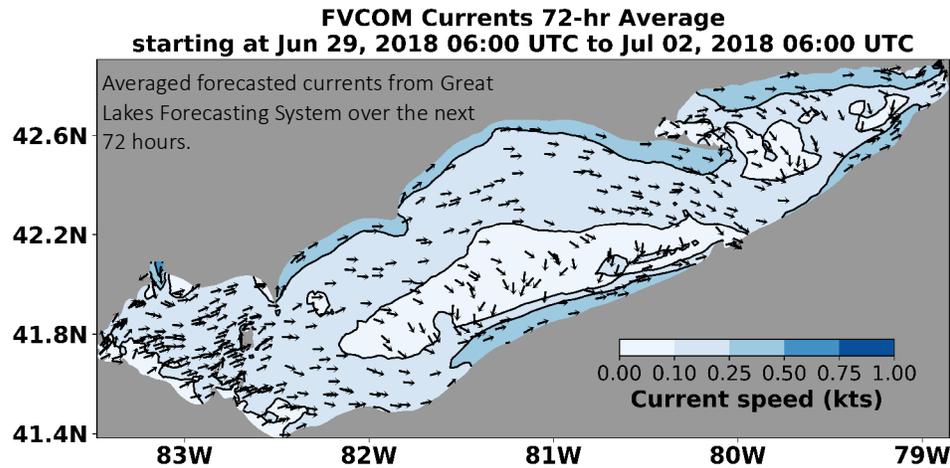


Figure 4. Forecast position of bloom for 02 July, 2018 using GLFS modelled currents to move the bloom from the 28 June, 2018 image.



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<https://tidesandcurrents.noaa.gov/hab/lakeerie.html>