



Lake Erie Harmful Algal Bloom Bulletin

15 August, 2019, Bulletin 14

Analysis

The *Microcystis* cyanobacteria bloom continues in the western basin of Lake Erie. Satellite imagery (8/14) shows the bloom extending from Maumee Bay north along the Michigan coast to Brest Bay, east along the Ohio coast to the Marblehead Peninsula; and offshore to the Bass Islands and Point Pelee. Measured toxin concentrations have decreased since last week, but may continue to exceed the recreational threshold where the bloom is most dense (appearing green from a boat). *Keep pets and yourself out of the water in areas where scum is forming.* The persistent cyanobacteria bloom in Sandusky Bay continues. No other blooms are present in Lake Erie.

Forecasts

Winds (3-11 kn) forecast over the weekend (8/16-18) will promote slight mixing and net eastward transport of surface *Microcystis* concentrations toward the Bass Islands. -Davis, 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

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

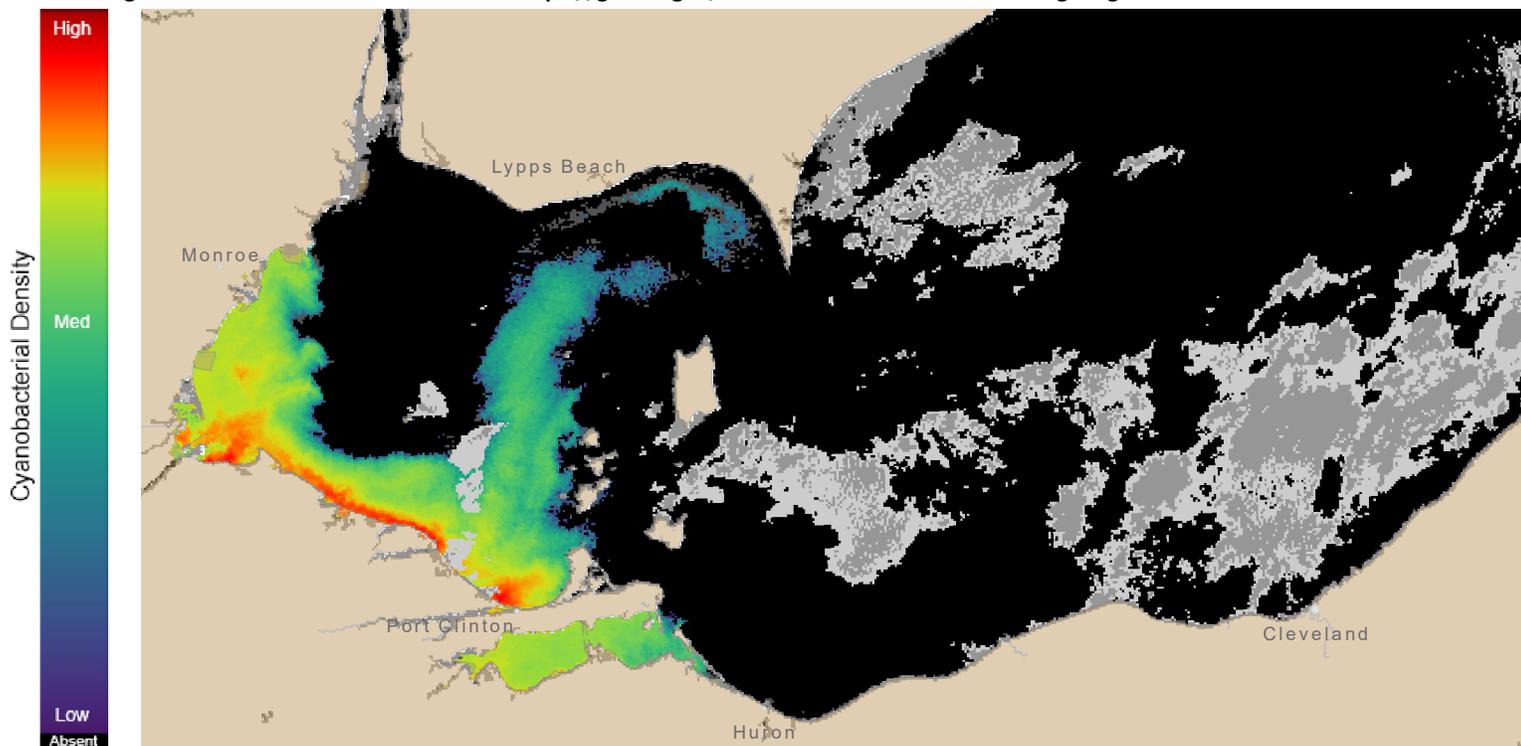


Figure 1. Cyanobacterial Index from modified Copernicus Sentinel 3 data collected 14 August, 2019 at 11:42 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

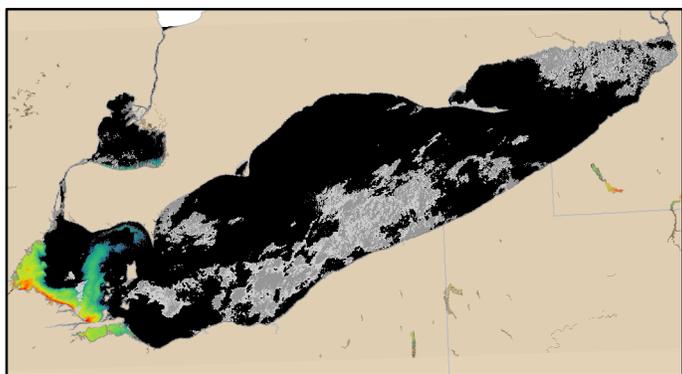
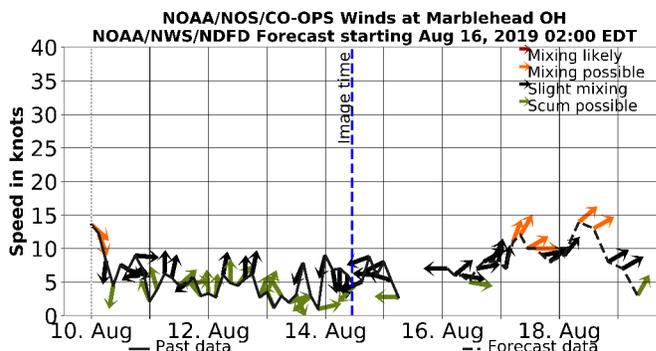


Figure 2. Cyanobacterial Index from modified Copernicus Sentinel 3 data collected 14 August, 2019 at 11:42.



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>

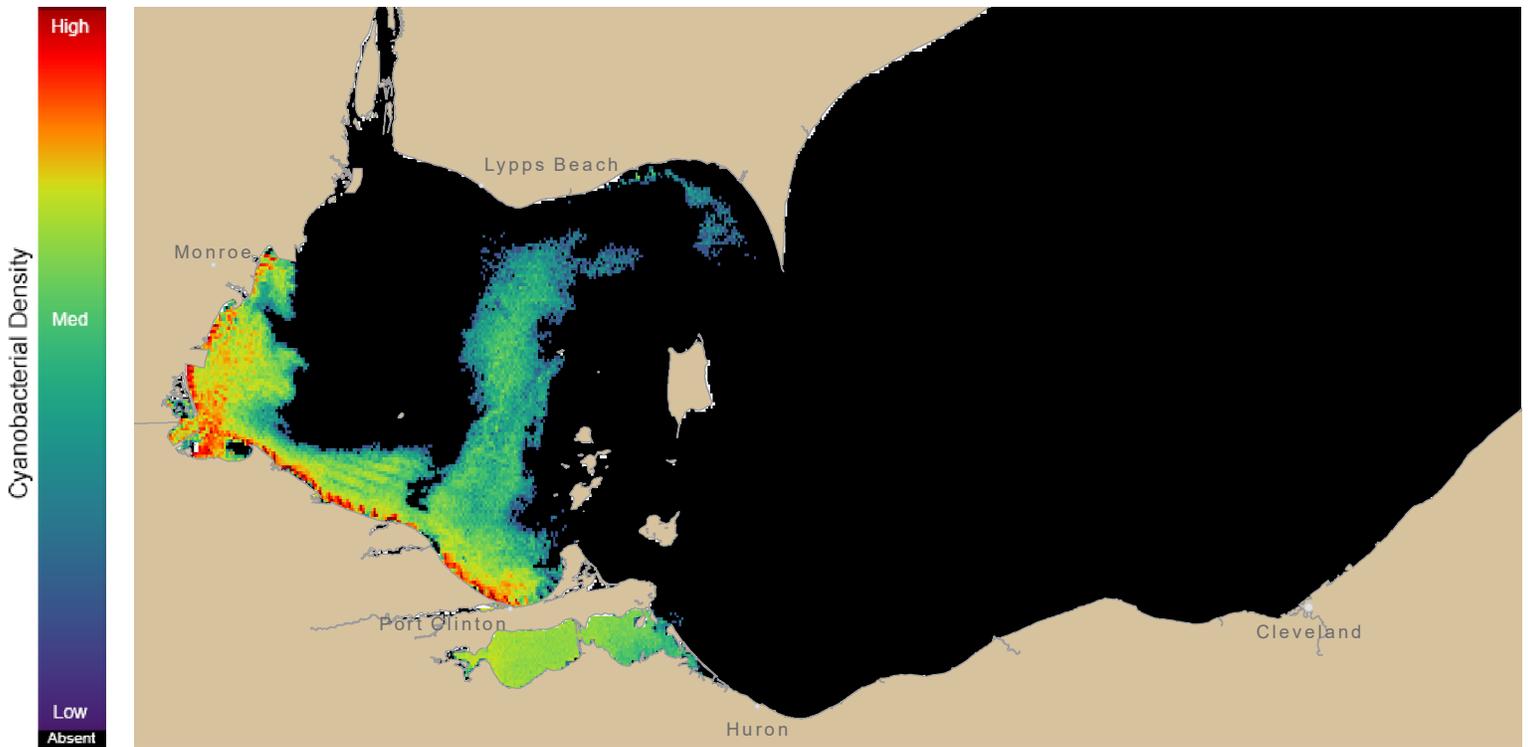


Figure 3. Nowcast position of bloom for 15 August, 2019 using LEOFS modelled currents to move the bloom from the 14 August, 2019

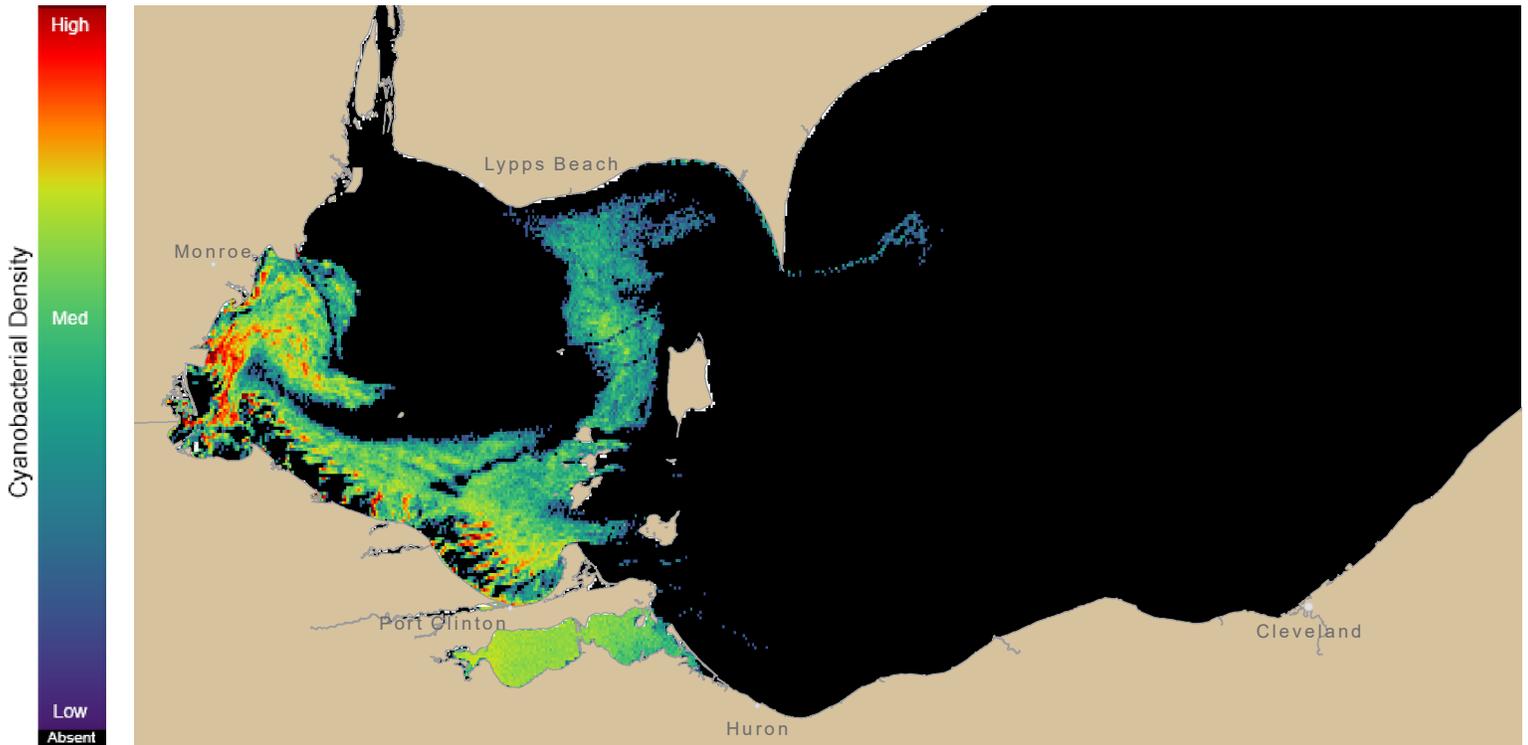
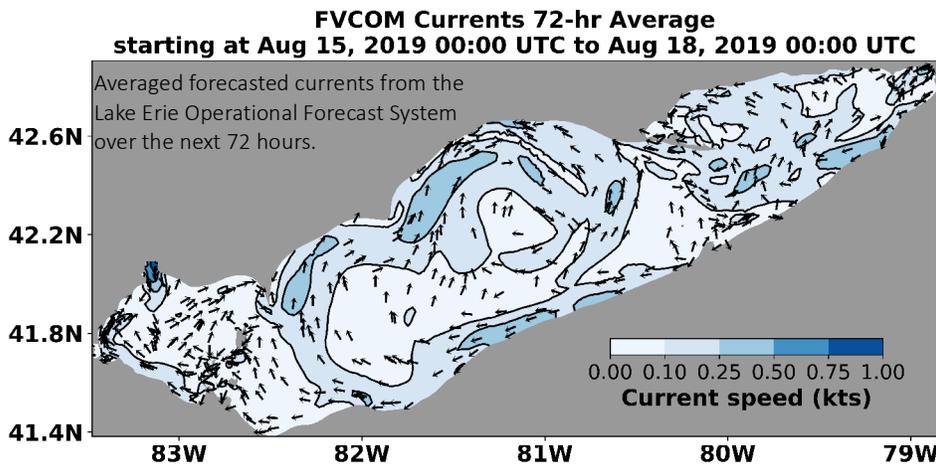


Figure 4. Forecast position of bloom for 18 August, 2019 using LEOFS modelled currents to move the bloom from the 14 August, 2019



For more information and to subscribe, please visit the NOAA HAB Forecast page: <https://tidesandcurrents.noaa.gov/hab/lakeerie.html>