



# Lake Erie Harmful Algal Bloom Bulletin

16 August, 2018, Bulletin 17

## Analysis

The *Microcystis* cyanobacteria bloom continues in the western basin of Lake Erie. In recent satellite imagery (8/14), the bloom extends from Maumee Bay north along the Michigan coast to Brest Bay and extends along the Ohio coast, through the Islands, and up to 9 miles east of Pelee Island. Calm winds observed this week (8/13-15) may have promoted scum formation where surface *Microcystis* concentrations are most dense. Toxin concentrations were detected at all sampling sites but are still below the recreational threshold throughout the bloom extent of the bloom. *Keep pets and yourself out of the water in areas where scum is forming.* The persistent cyanobacteria bloom in Sandusky Bay continues.

## Forecasts

Winds (6-14 kn) forecast today through Monday (8/16-20) may lead to mixing of surface *Microcystis* concentrations and may promote northeastward transport into the central basin of Lake Erie. --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](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.

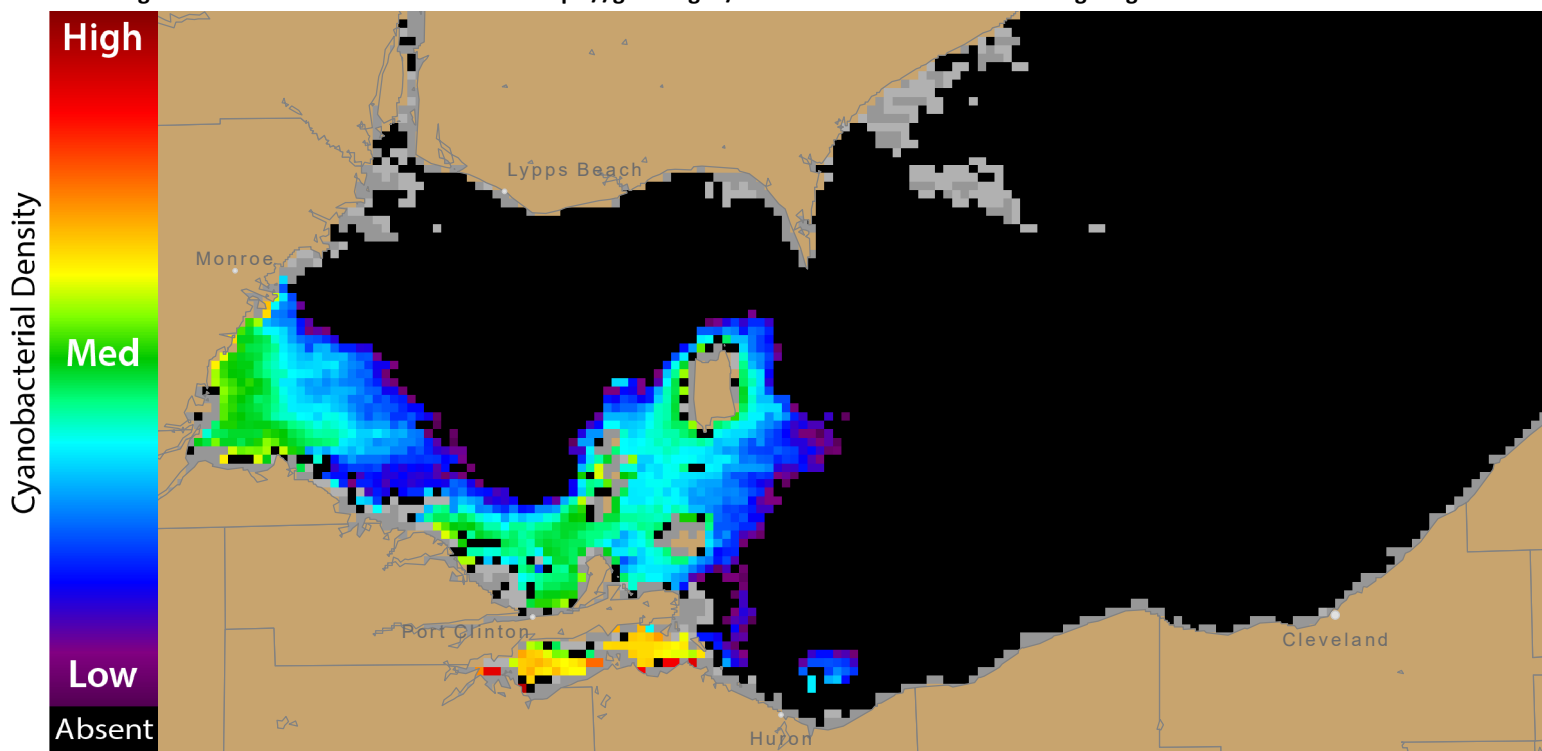


Figure 1. Cyanobacterial Index from NASA MODIS-Aqua data collected 14 August, 2018 at 13:14 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

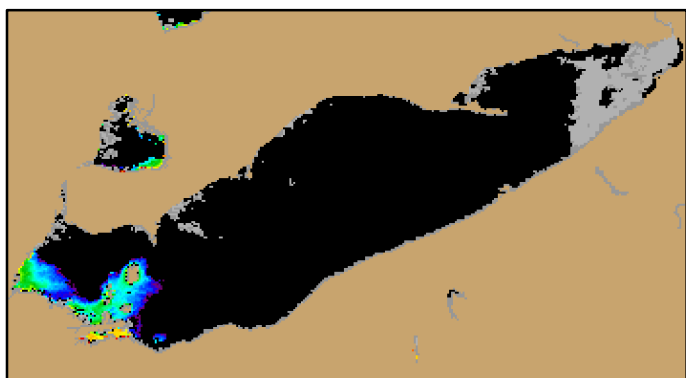
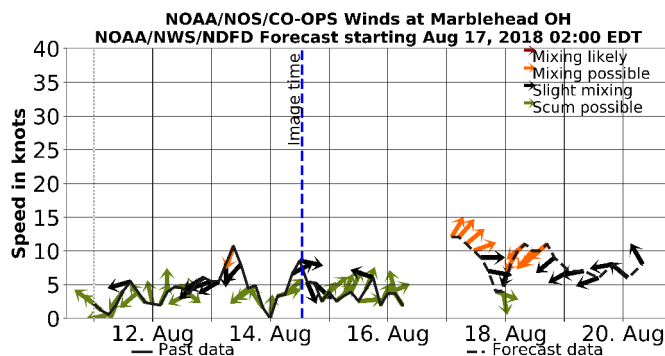


Figure 2. Cyanobacterial Index from NASA MODIS-Aqua data collected 14 August, 2018 at 13:14.



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>

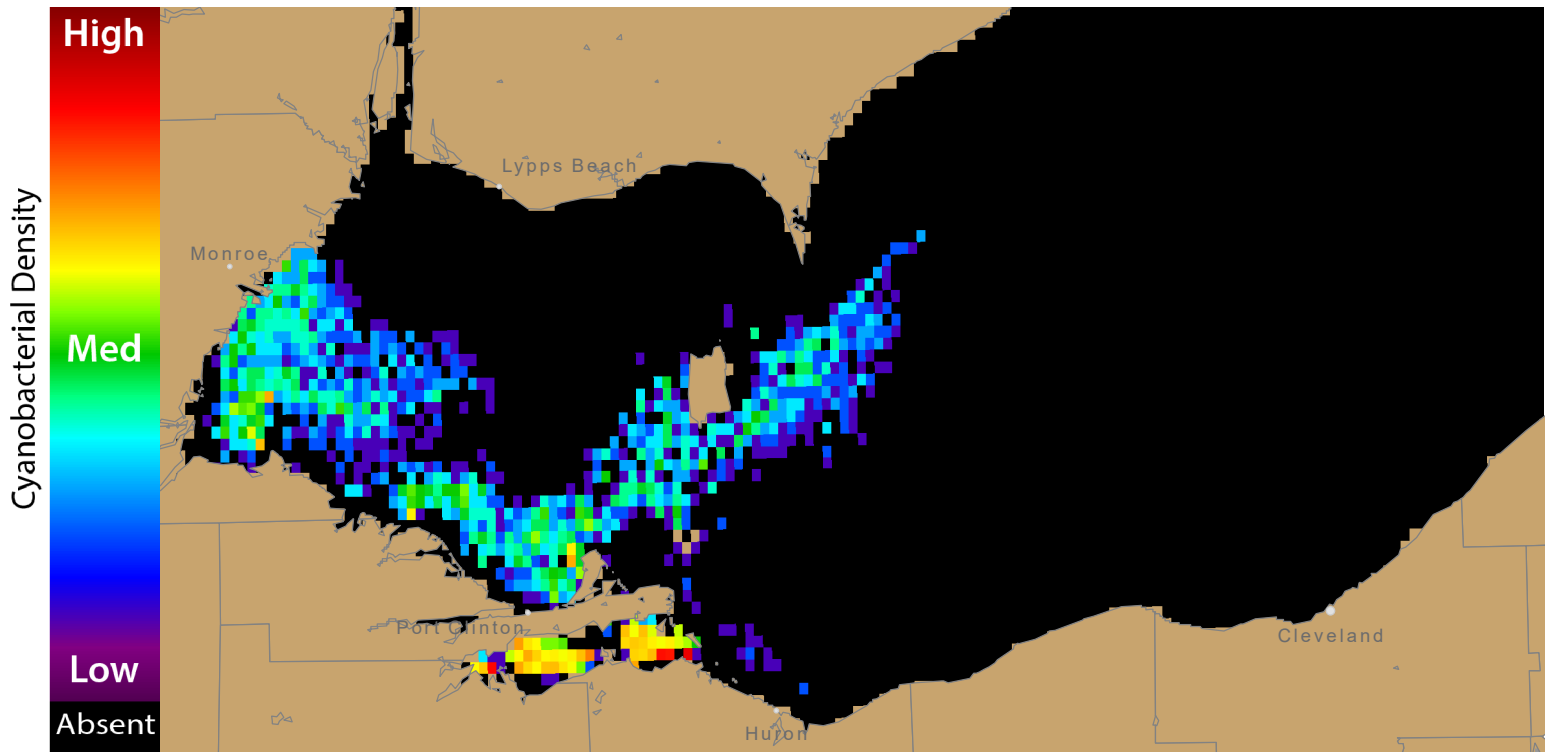


Figure 3. Nowcast position of bloom for 16 August, 2018 using LEOFS modelled currents to move the bloom from the 14 August, 2018

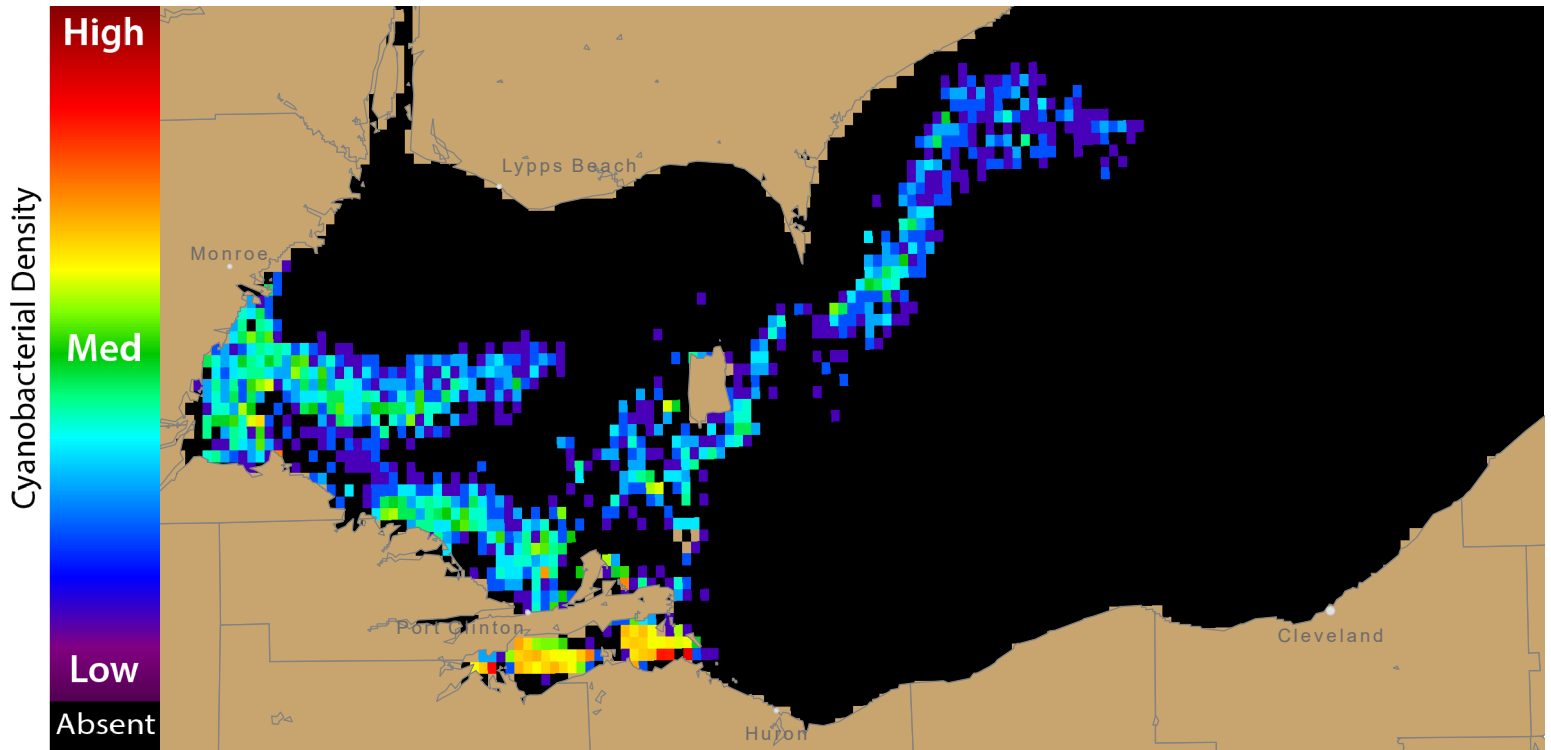
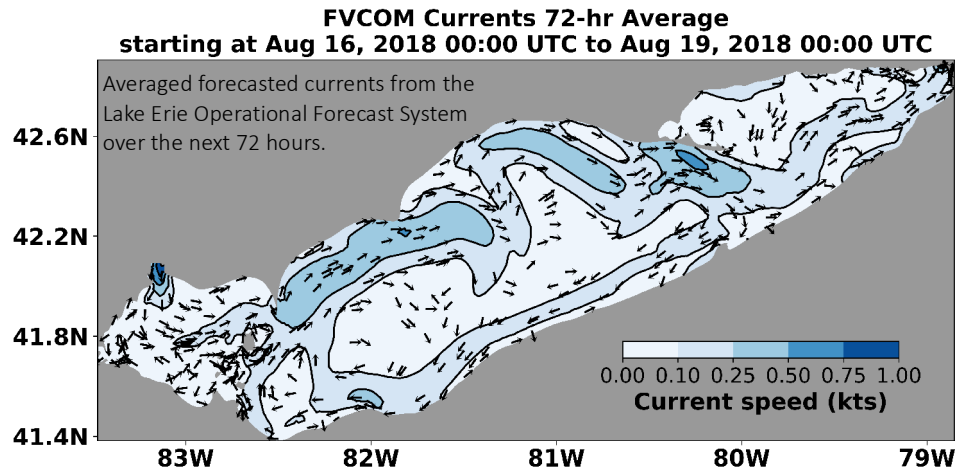


Figure 4. Forecast position of bloom for 19 August, 2018 using LEOFS modelled currents to move the bloom from the 14 August, 2018



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