



# Lake Erie Harmful Algal Bloom Bulletin

13 August, 2018, Bulletin 16

## Analysis

The *Microcystis* cyanobacteria bloom continues in Lake Erie and is now present in the central basin. In recent satellite imagery (8/11) 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 30 miles east of Pelee Island. Calm winds observed over the weekend (8/10-12) promoted scum formation where surface *Microcystis* concentrations are most dense. Toxin concentrations are still below the recreational threshold throughout the bloom extent. *Keep pets and yourself out of the water in areas where scum is forming.* The persistent cyanobacteria bloom in Sandusky Bay continues.

## Forecasts

Winds (4-18 kn) forecast today through Thursday (8/13-16) may lead to mixing of surface *Microcystis* concentrations and may promote northeastward transport.

--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.

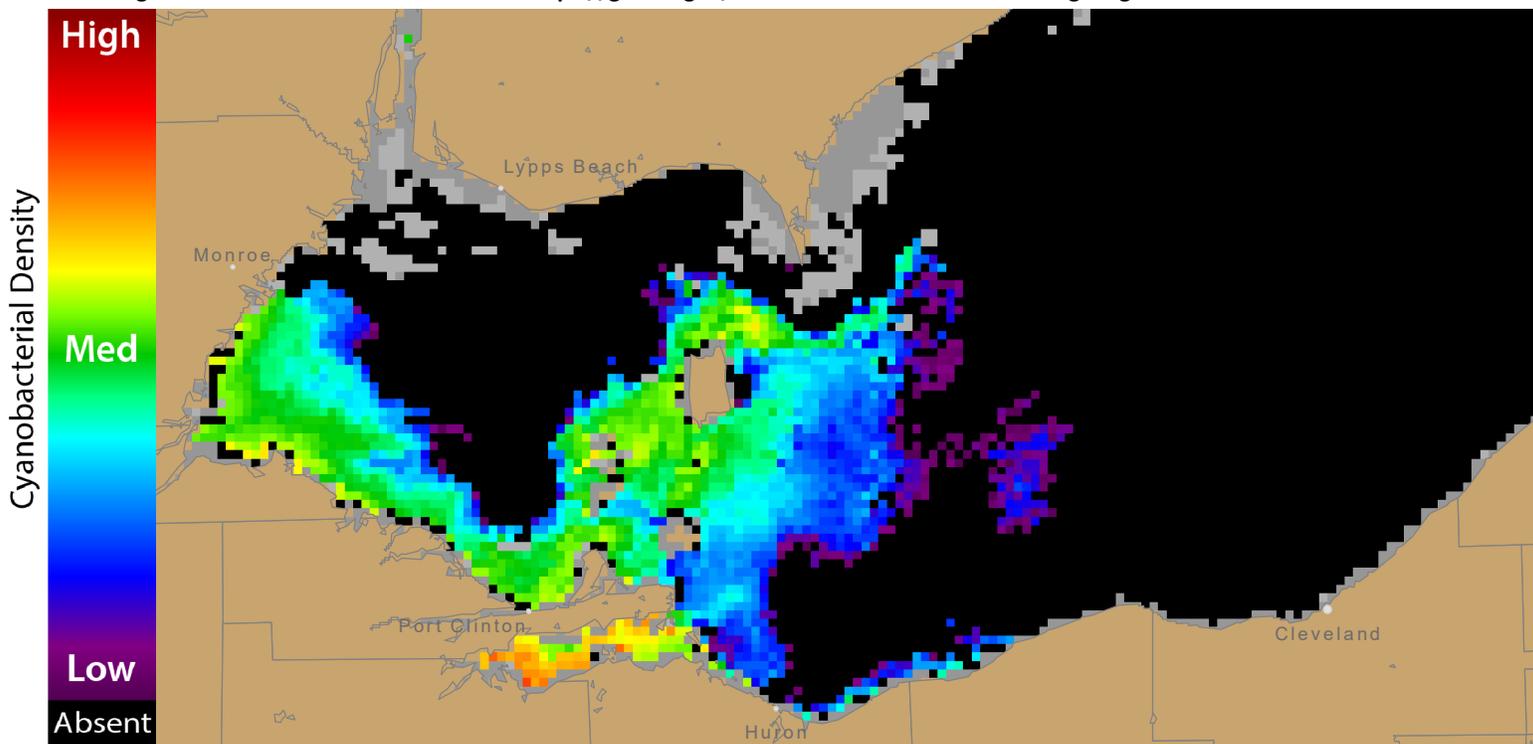


Figure 1. Cyanobacterial Index from NASA MODIS-Aqua data collected 11 August, 2018 at 14:21 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

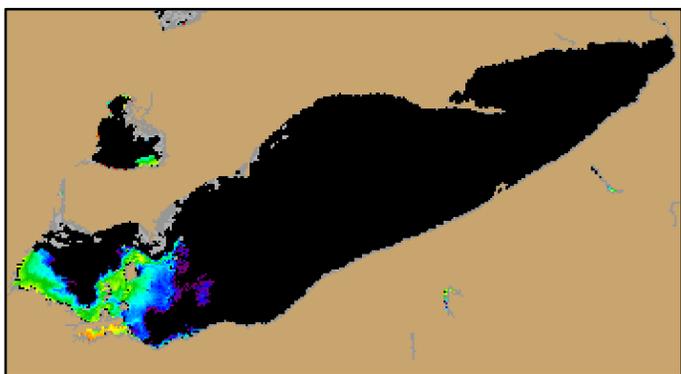
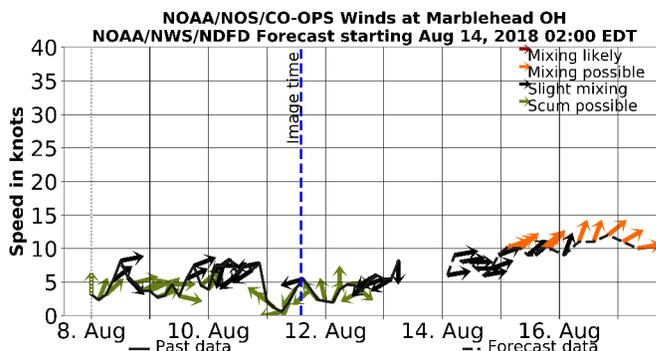


Figure 2. Cyanobacterial Index from NASA MODIS-Aqua data collected 11 August, 2018 at 14:21.



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>

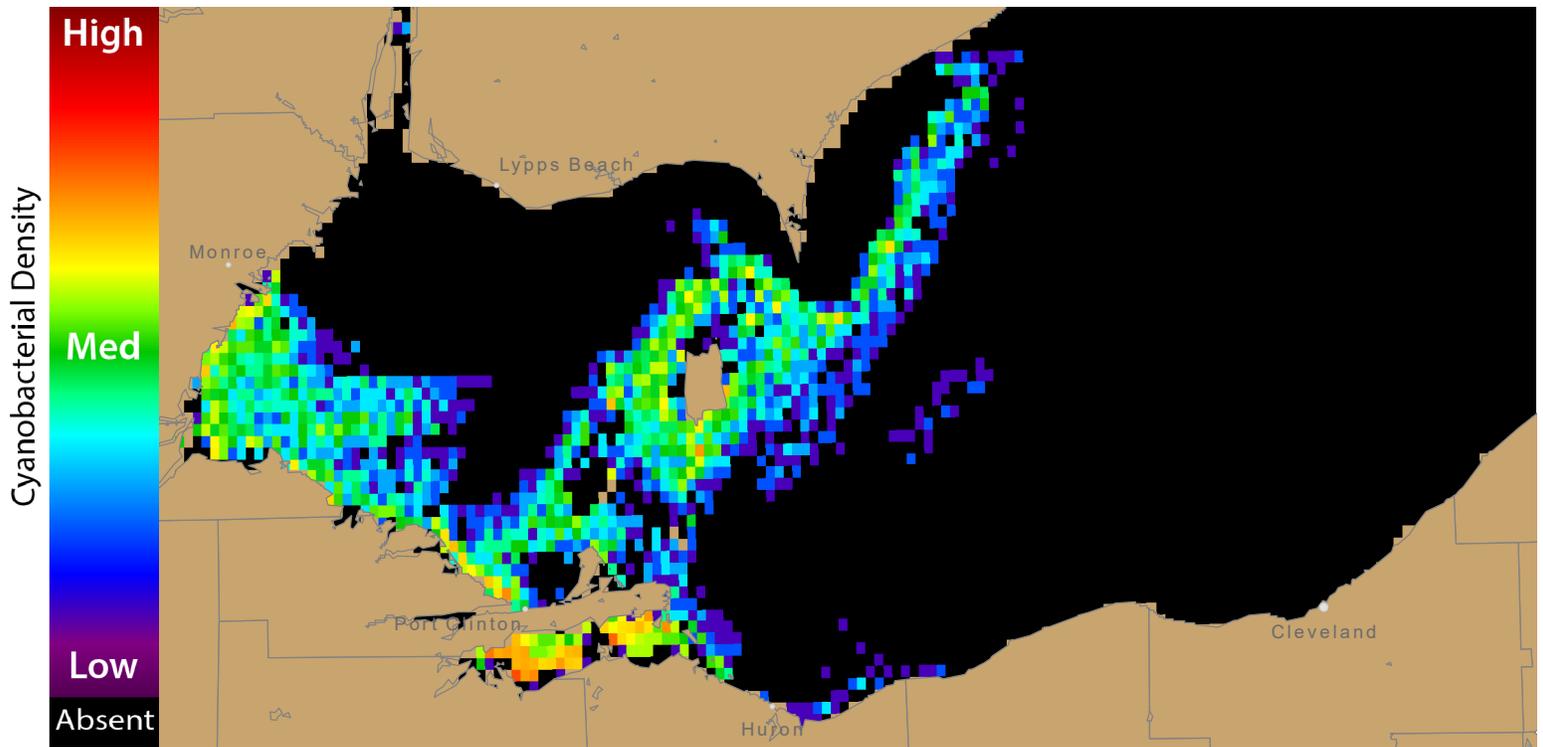


Figure 3. Nowcast position of bloom for 13 August, 2018 using LEOFS modelled currents to move the bloom from the 11 August, 2018

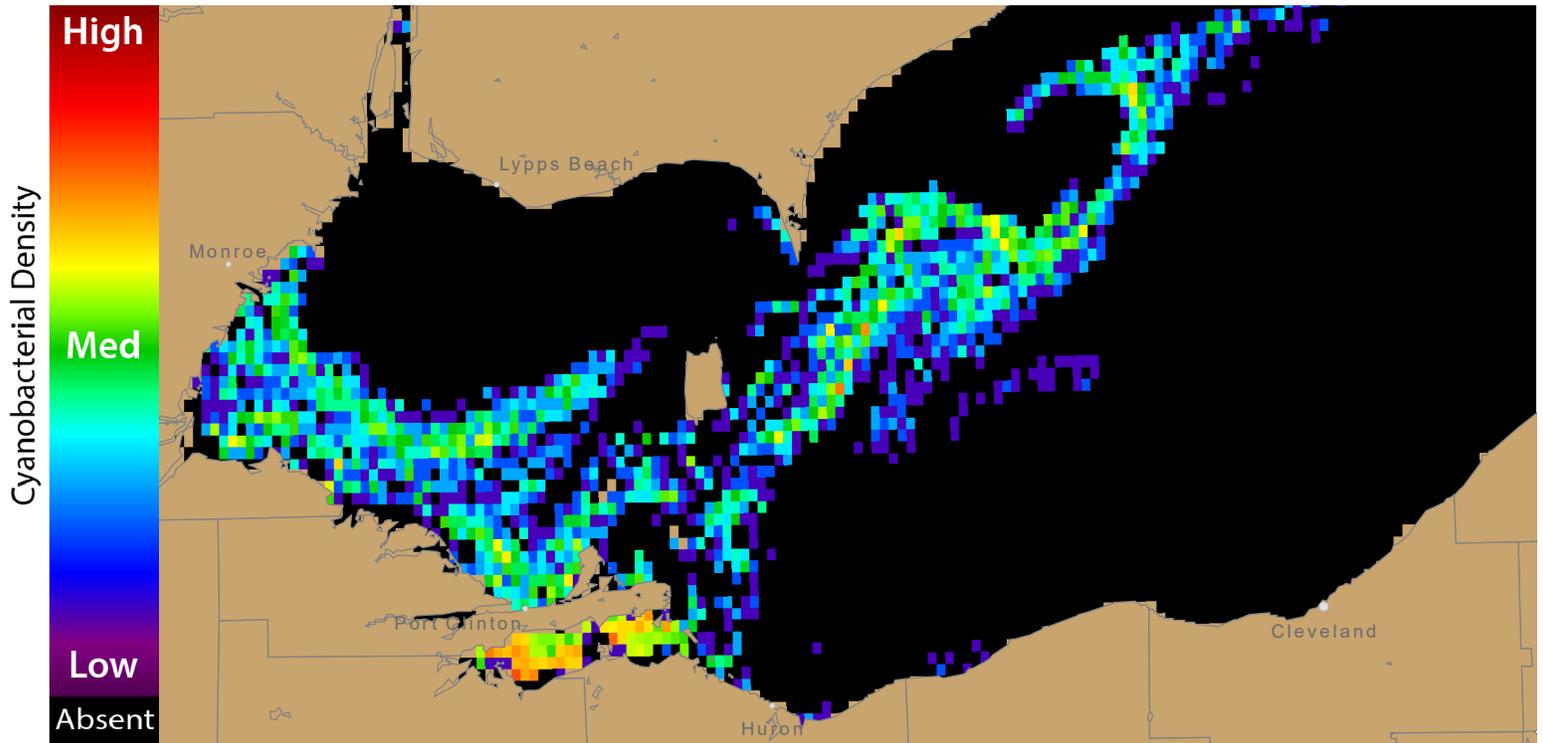
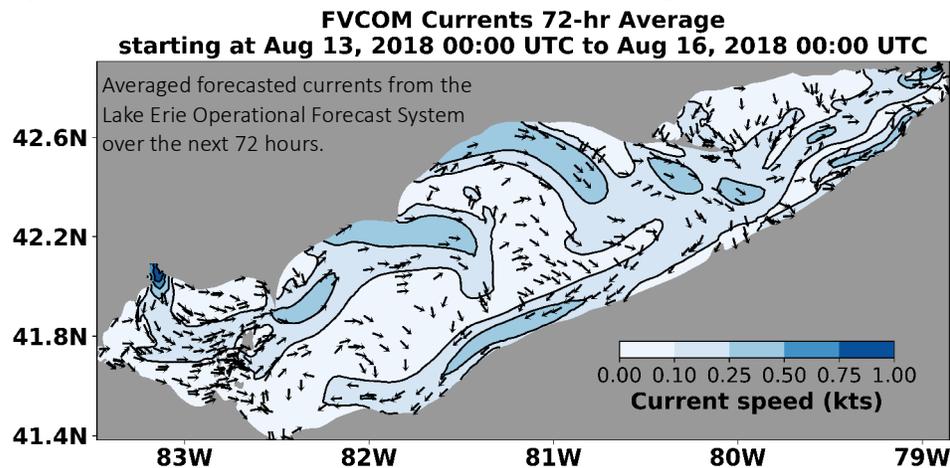


Figure 4. Forecast position of bloom for 16 August, 2018 using LEOFS modelled currents to move the bloom from the 11 August, 2018



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