



Lake Erie Harmful Algal Bloom Bulletin

28 August, 2017, Bulletin 14

The *Microcystis* cyanobacteria bloom continues in the western basin, extending along the Ohio and Michigan coasts, northeast to the Ontario coast, touching Point Pelee. Observed winds (5-15kn) Friday and Saturday (8/25-26) caused mixing which reduced previously visible surface concentrations. Measured toxin concentrations exceed the threshold safe for recreation in some regions of the western extent of the bloom, particularly between Maumee Bay and West Sister Island.

Forecast winds (5-15kn) today through Thursday (8/28-31) may cause slight mixing of surface concentrations of *Microcystis*. Winds forecast today through Sunday (8/24-27) may promote easterly transport of *Microcystis* concentrations. Clouds will likely obscure the lake through Wednesday (8/30).

Please check Ohio EPA's site on harmful algal blooms for safety information <http://epa.ohio.gov/habalgae.aspx>. Keep pets and yourself out of the water in areas where scum is present. NOAA's GLERL provides additional HAB data:

https://www.glerl.noaa.gov/res/HABs_and_Hypoxia. The persistent cyanobacteria bloom in Sandusky Bay continues. No blooms are visible in the central and eastern basins. -Keeney, Davis

The images below are "GeoPDF". To see the longitude and latitude under your cursor, select "Tools > Analyze > Geospatial Location Tool".

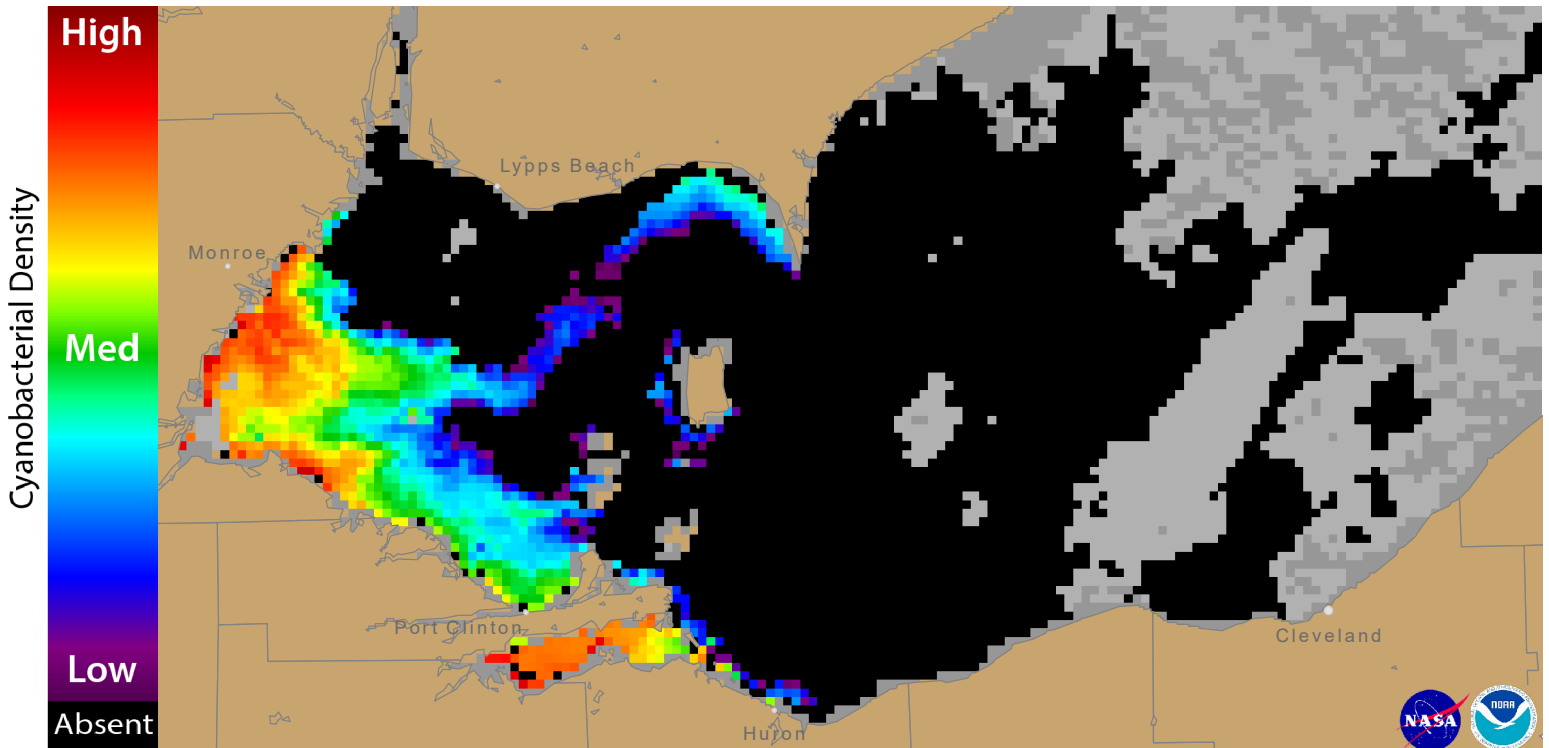


Figure 1. Cyanobacterial Index from NASA MODIS-Aqua data collected 27 August, 2017 at 13:13 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

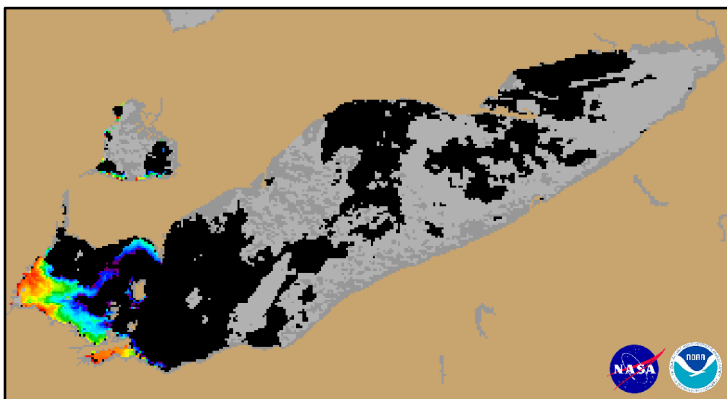
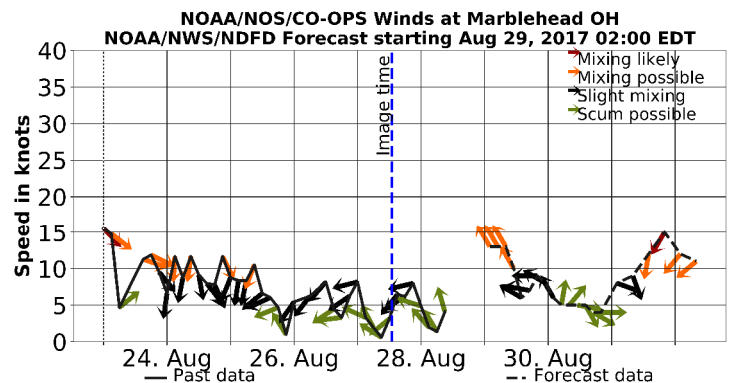


Figure 2. Cyanobacterial Index from NASA MODIS-Aqua data collected 27 August, 2017 at 13:13.



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).

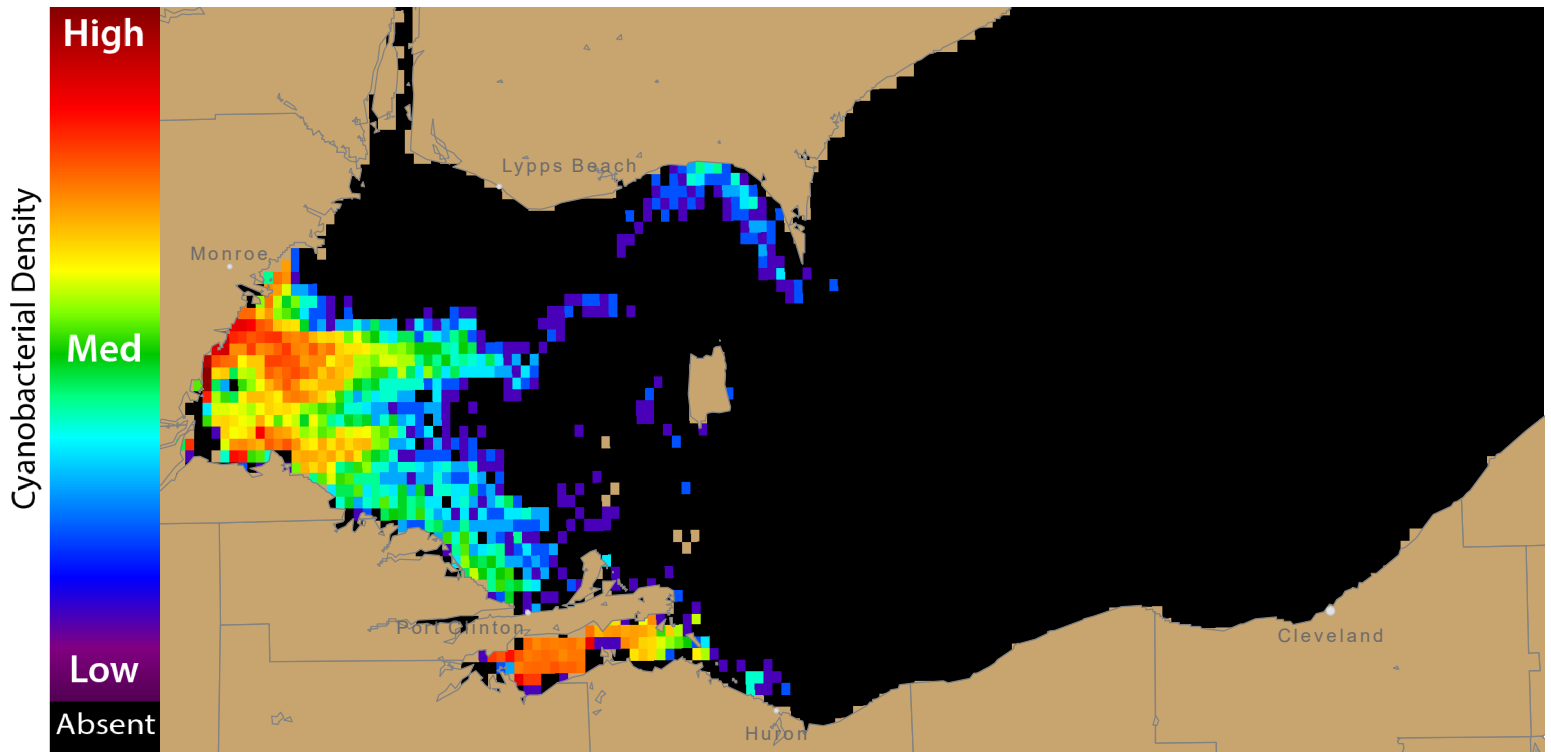


Figure 3. Nowcast position of bloom for 28 August, 2017 using GLFS modelled currents to move the bloom from the 27 August, 2017 image.

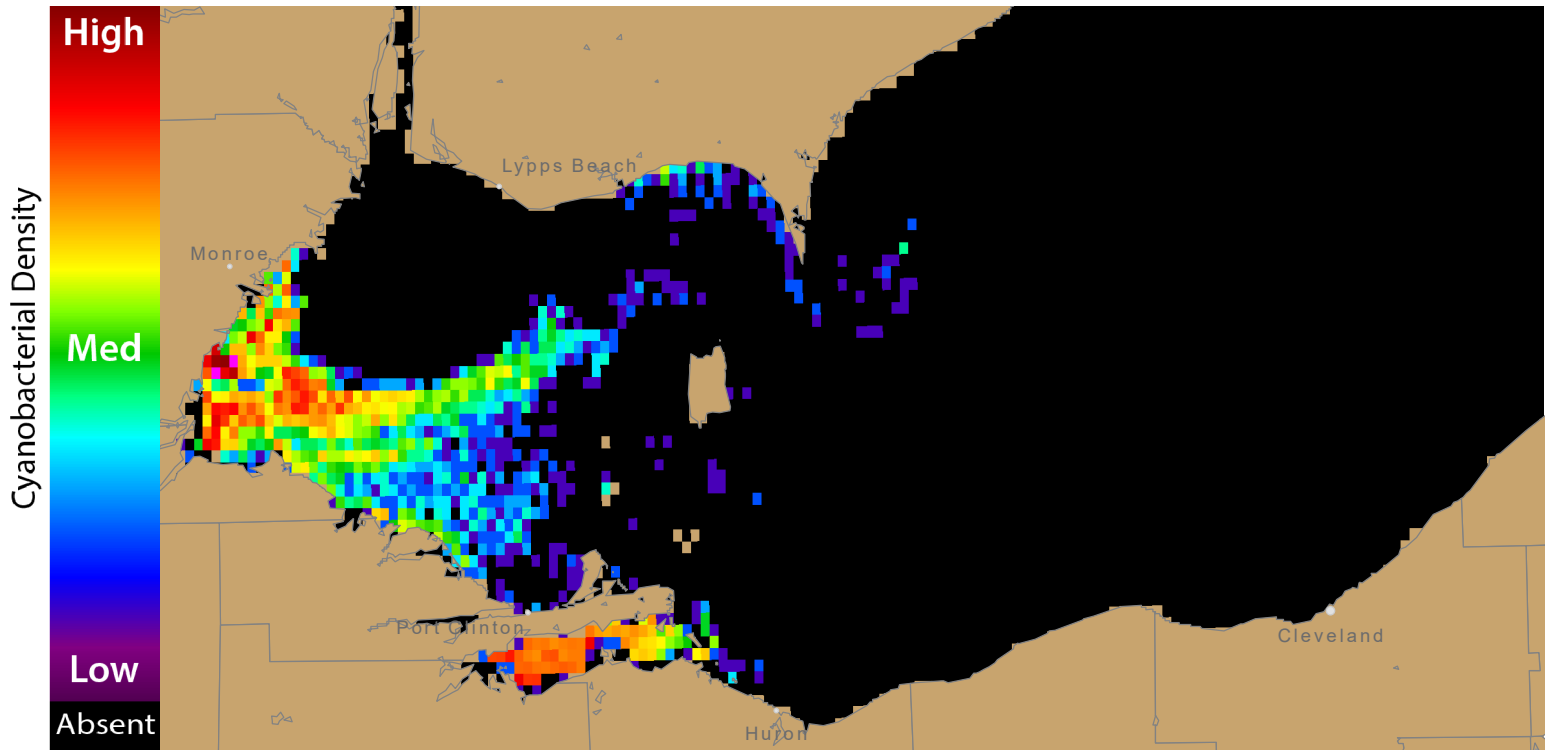
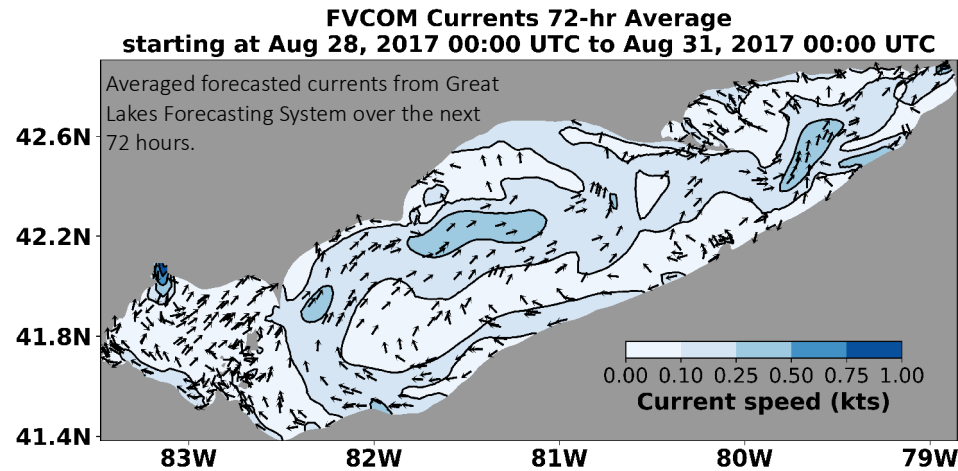


Figure 4. Forecast position of bloom for 31 August, 2017 using GLFS modelled currents to move the bloom from the 27 August, 2017 image.



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