



Lake Erie Harmful Algal Bloom Bulletin

07 August, 2017, Bulletin 08

The *Microcystis* cyanobacteria bloom continues in the western basin along- and offshore the Ohio and Michigan coast from Maumee Bay north past Stony Point. Observed winds yesterday (8/6) reduced mixing that may have increased surface concentrations from earlier. Scums have been reported. Measured toxin concentrations are below the recreational thresholds throughout most of the bloom extent, but concentrations can exceed the threshold where the bloom is most dense (which would look green from a boat).

Forecast winds (3-5kn) tomorrow through Friday (8/8-11) may reduce mixing, increasing the surface concentrations of *Microcystis*. Winds will promote easterly transport of *Microcystis* today through Saturday (8/7-12) towards the Bass Islands.

The persistent cyanobacteria bloom of *Planktothrix* continues in Sandusky Bay and extends into Lake Erie. Keep your pets and yourself out of the water in areas where scum is forming. NOAA's GLERL provides additional HAB data:

https://www.glerl.noaa.gov/res/HABs_and_Hypoxia.

-Davis, Lalime

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

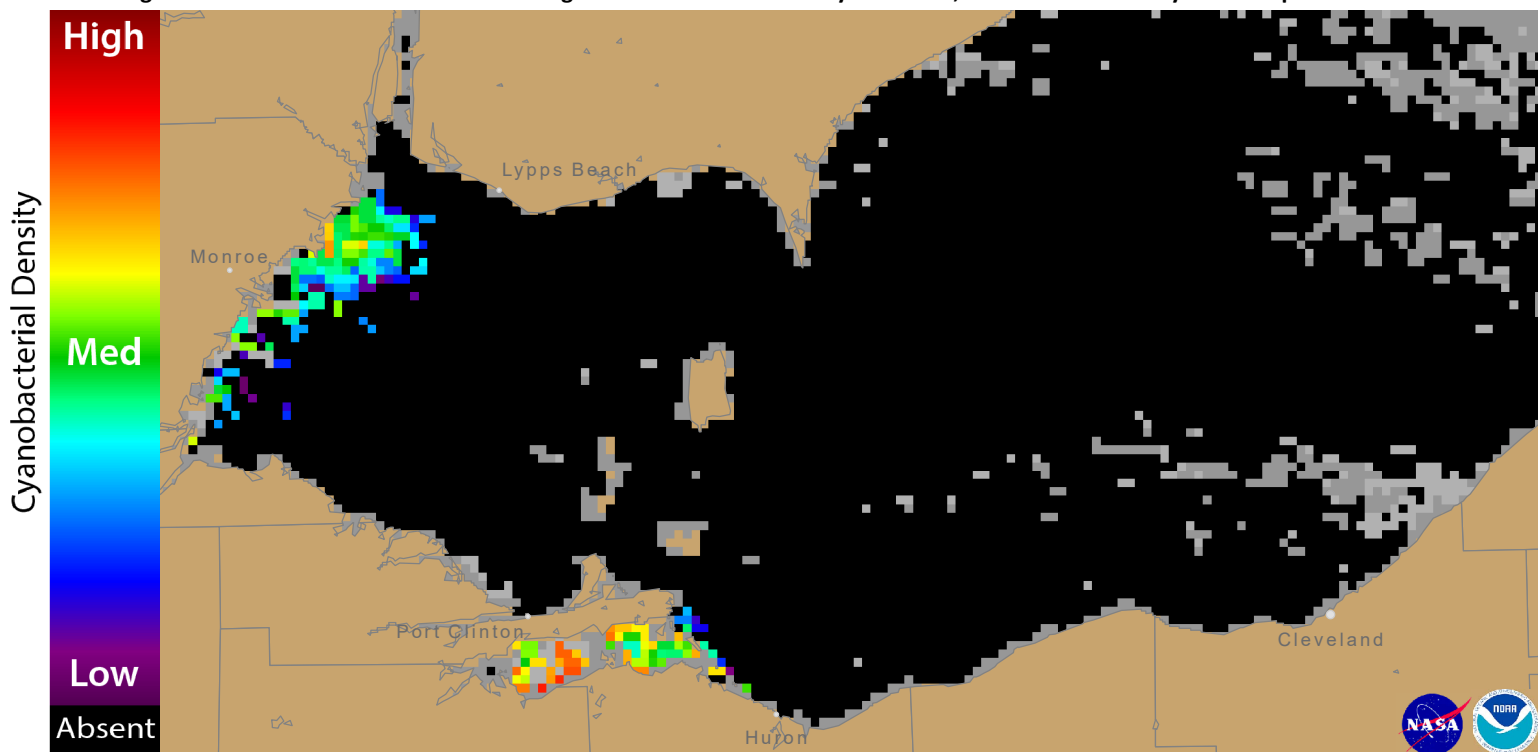


Figure 1. Cyanobacterial Index from NASA MODIS-Terra data collected 05 August, 2017 at 12:07 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

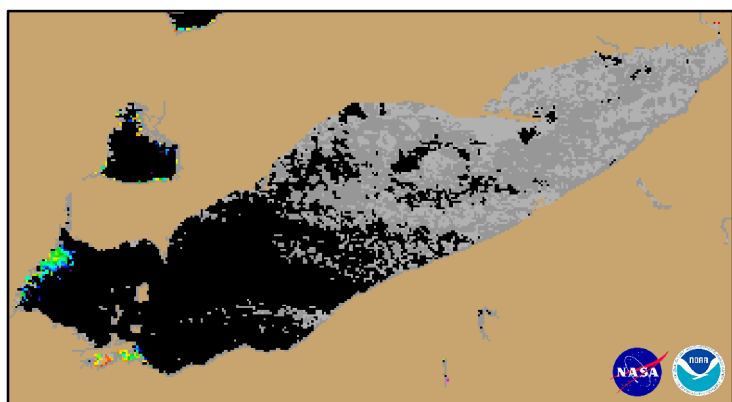
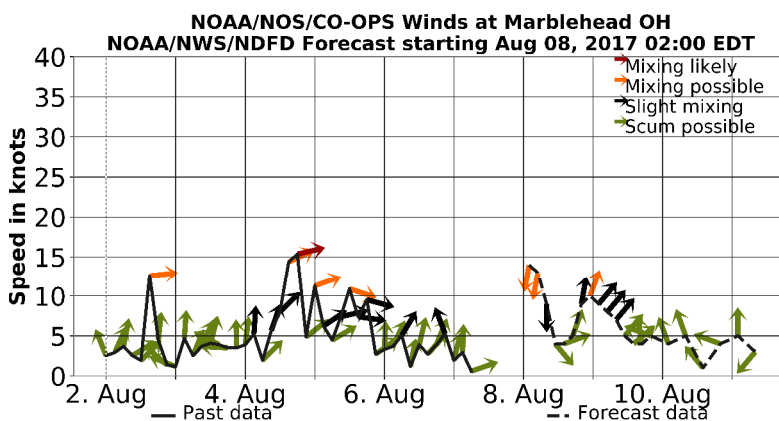


Figure 2. Cyanobacterial Index from NASA MODIS-Terra data collected 05 August, 2017 at 12:07.



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).

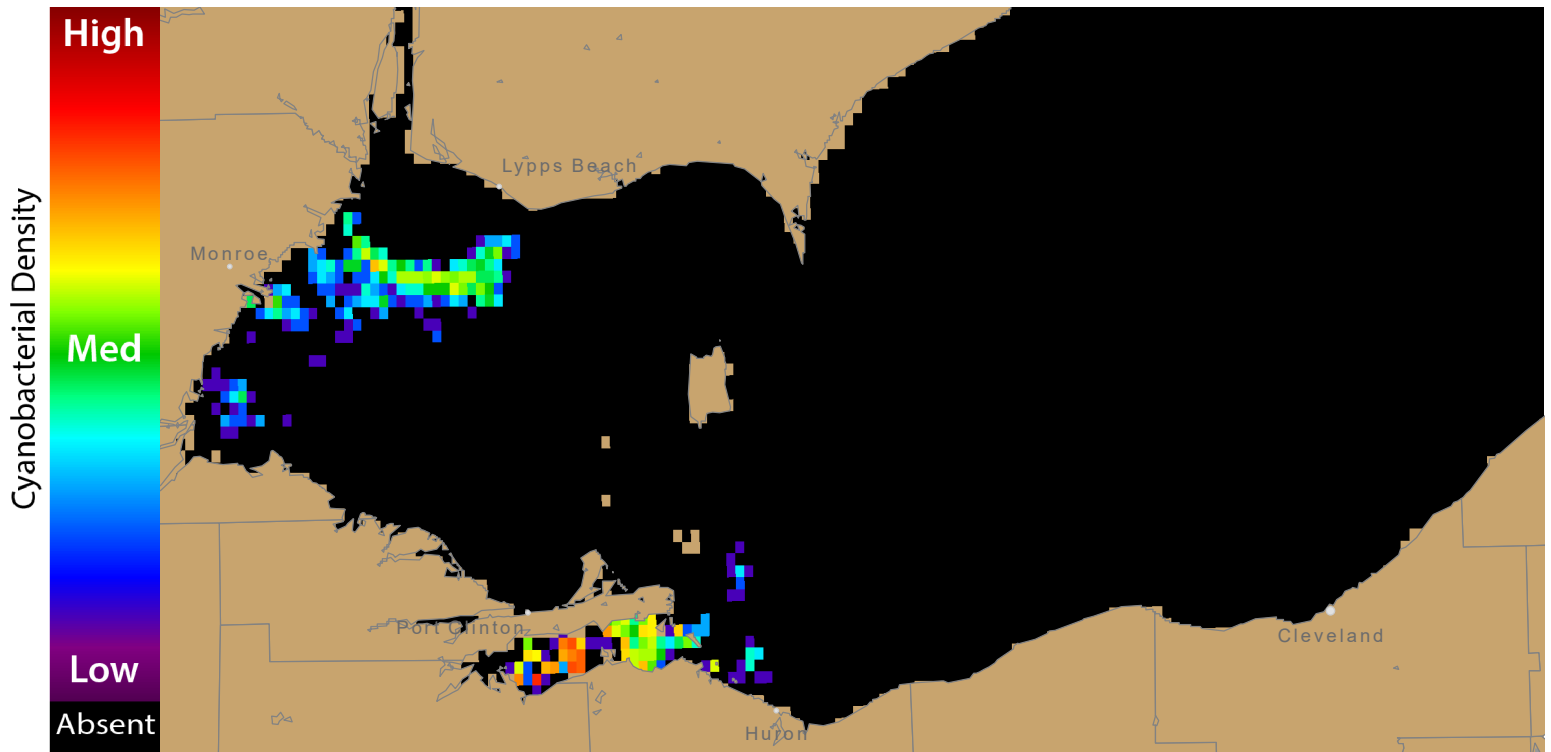


Figure 3. Nowcast position of bloom for 07 August, 2017 using GLFS modelled currents to move the bloom from the 05 August, 2017 image.

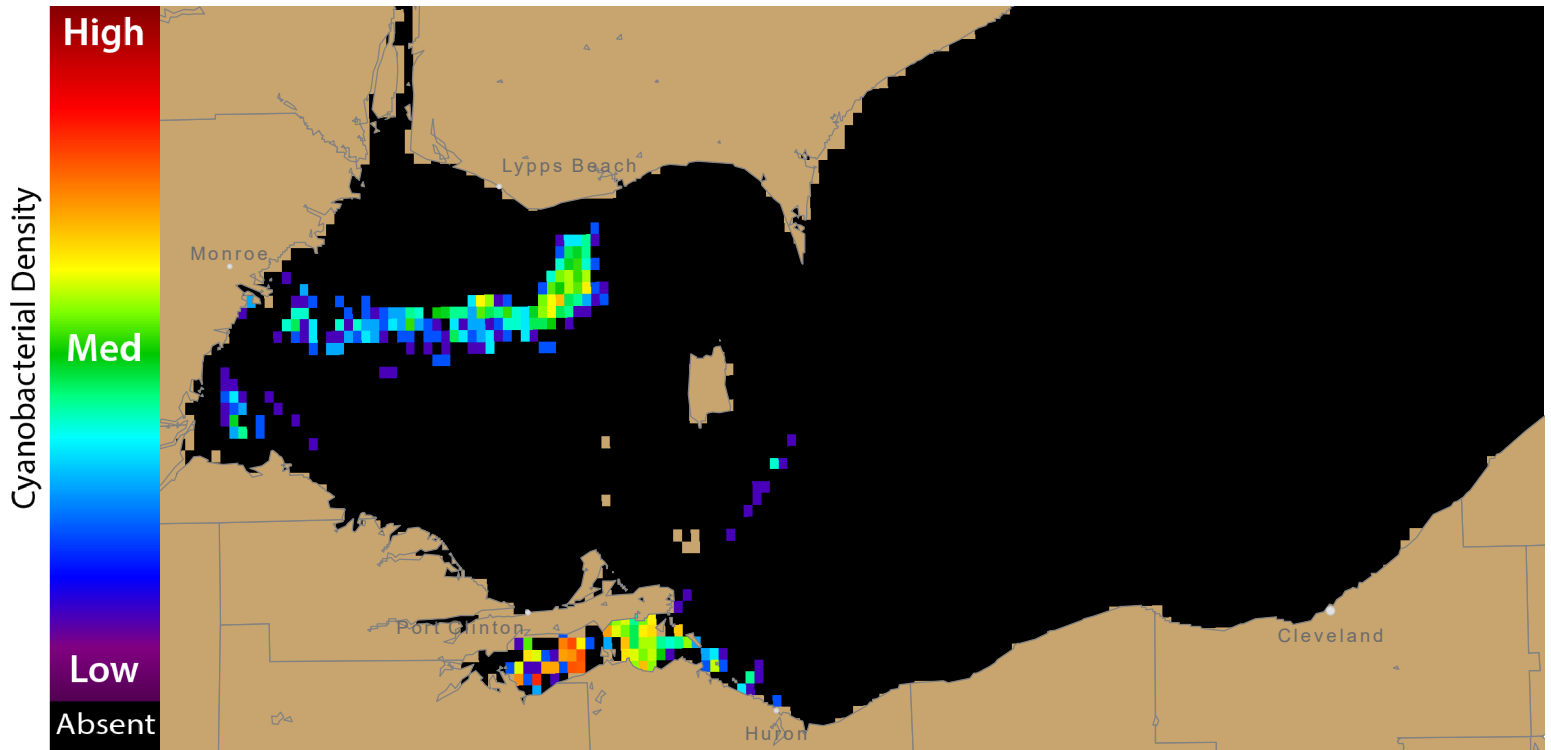
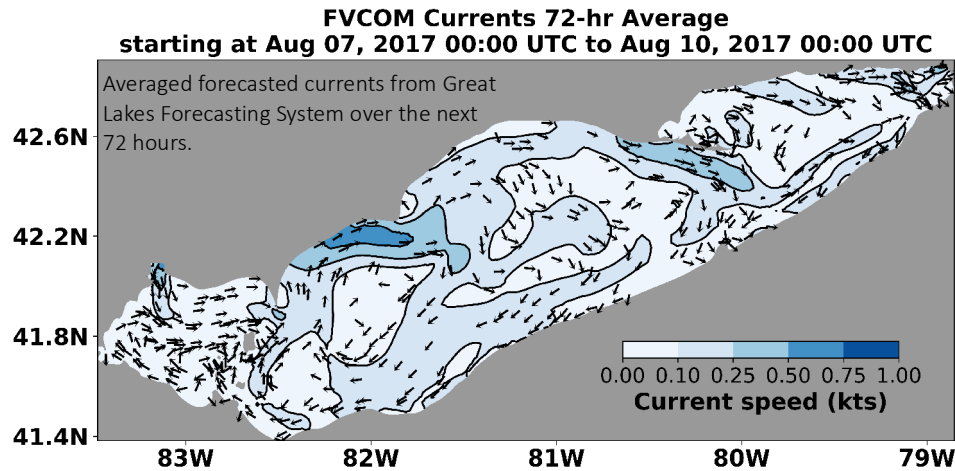


Figure 4. Forecast position of bloom for 10 August, 2017 using GLFS modelled currents to move the bloom from the 05 August, 2017 image.



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