



# Experimental Lake Erie Harmful Algal Bloom Bulletin

11 August, 2016, Bulletin 10

There are slight changes from the last bulletin. The cyanobacterial (*Microcystis*) bloom continues to be detectable in moderate concentrations in far western Lake Erie, extending from Maumee Bay along the Michigan coast. Low concentrations now extend east of West Sister Island, and there may be areas of very low concentrations near the islands. Low concentrations are variable along the Ohio coast east of Toledo. Scum areas have not been found. Measured toxin concentrations are below recreational thresholds over most of the bloom, however, in areas of dense bloom (which would look green from a boat) in the far west, the concentration can exceed the threshold.

Southerly to westerly winds are expected over the next few days. Some mixing is possible on Friday (Aug 12) into Saturday with moderate winds, then little mixing, with relatively calm winds into next week. The bloom may move northward and stretch eastward over the next few days, with the low concentration bloom extending closer to Ontario.

The persistent cyanobacteria bloom continues in Sandusky Bay. No blooms have been detected in the central basin or the eastern basin.

Please check Ohio EPA's site on harmful algal blooms for safety information. <http://epa.ohio.gov/habalgae.aspx> Thunderstorms are a greater risk. Boat safely.

Stumpf, Tomlinson

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

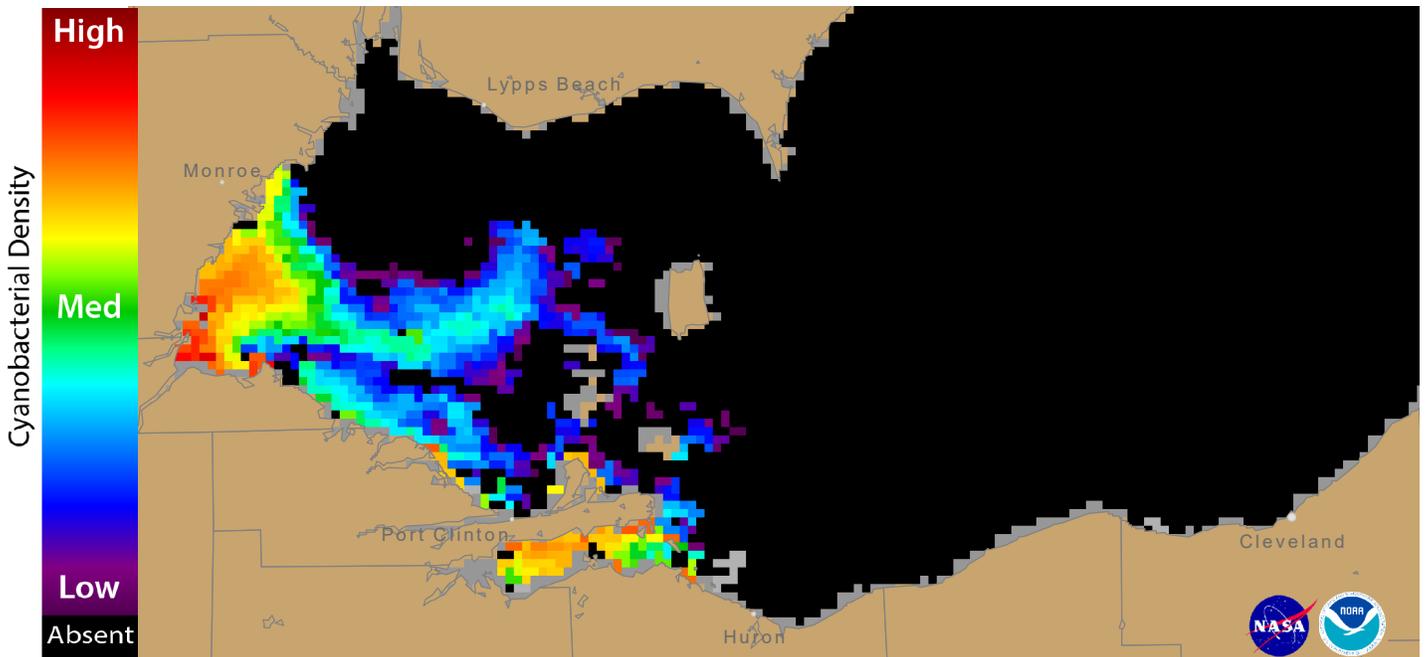
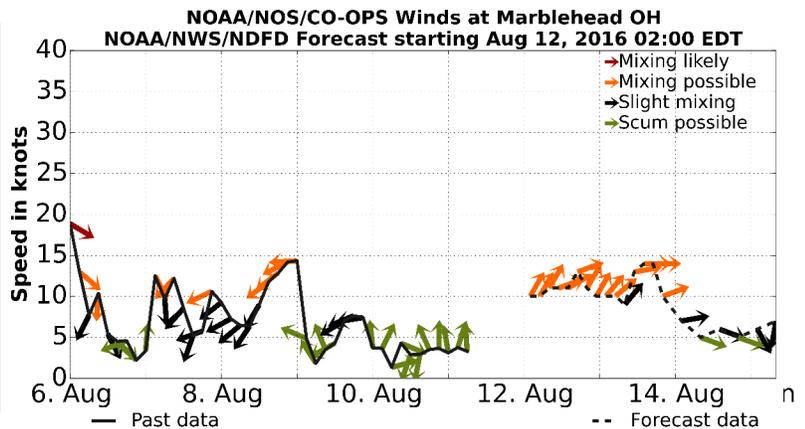


Figure 1. Cyanobacterial Index from NASA's MODIS-Terra data collected 10 August, 2016 at 11:18 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.



Figure 2. Cyanobacterial Index from NASA's MODIS-Terra data collected 10 August, 2016 at 11:18.



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: <http://coastalscience.noaa.gov/research/habs/forecasting>

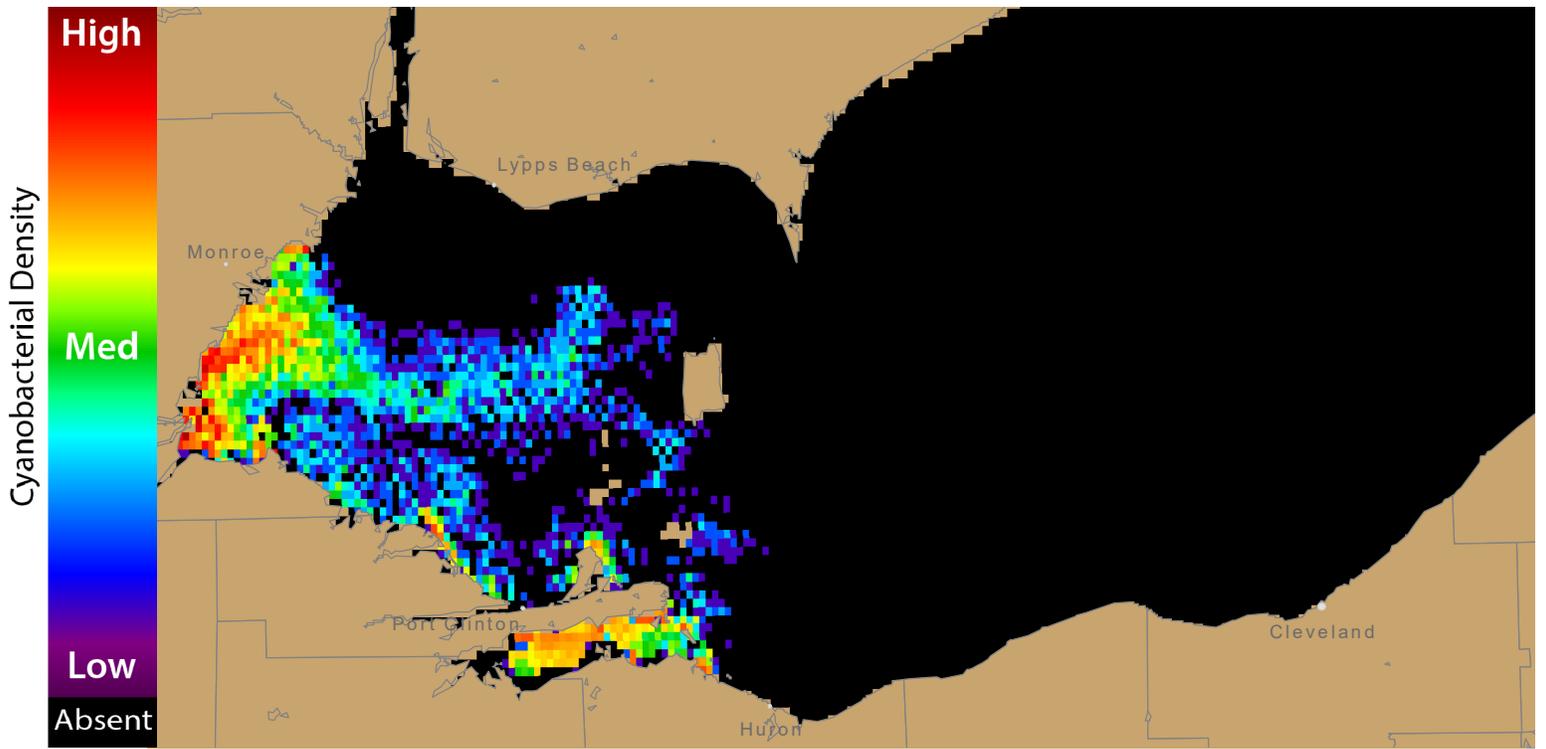


Figure 3. Nowcast position of bloom for 11 August, 2016 using GLFS modelled currents to move the bloom from the 10 August, 2016 image.

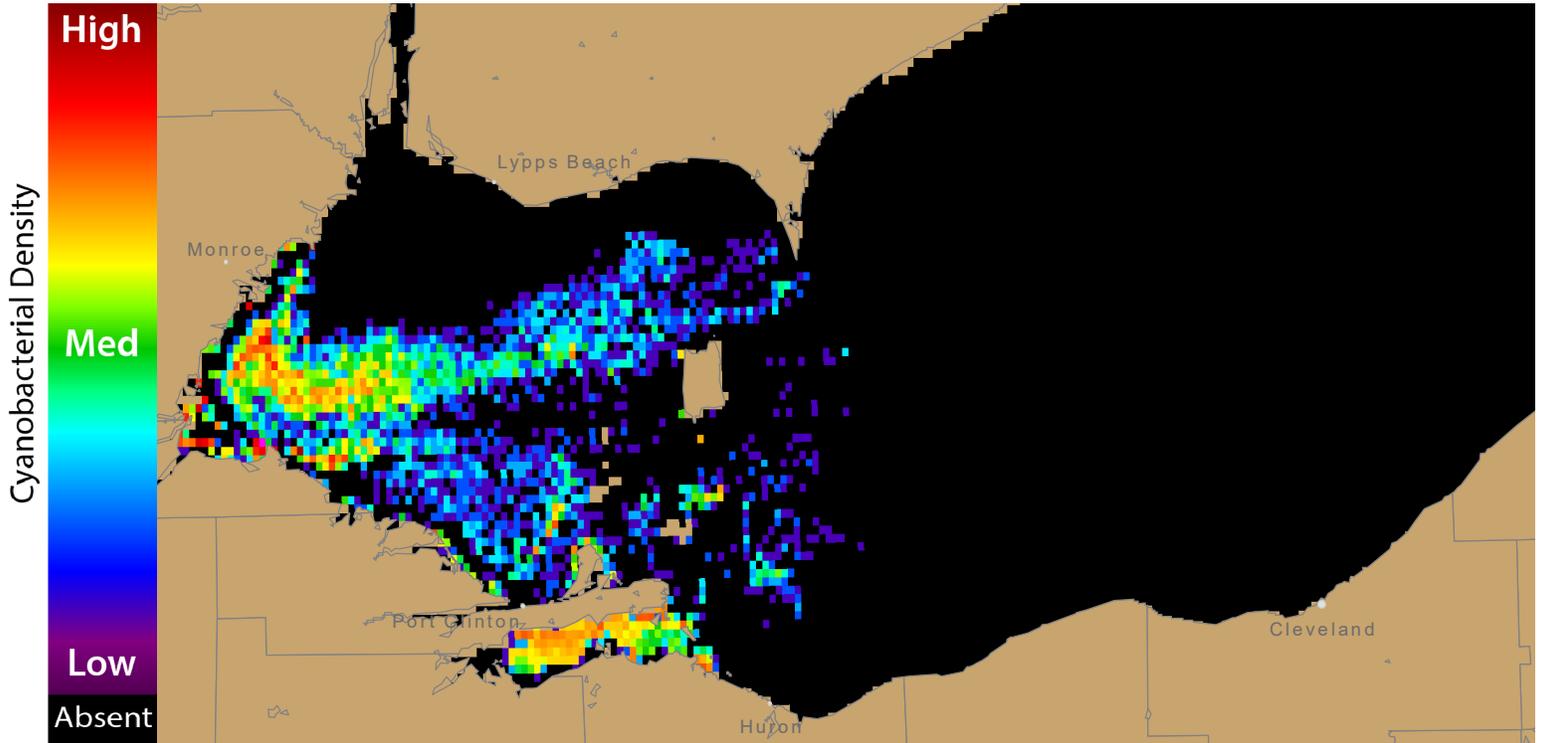
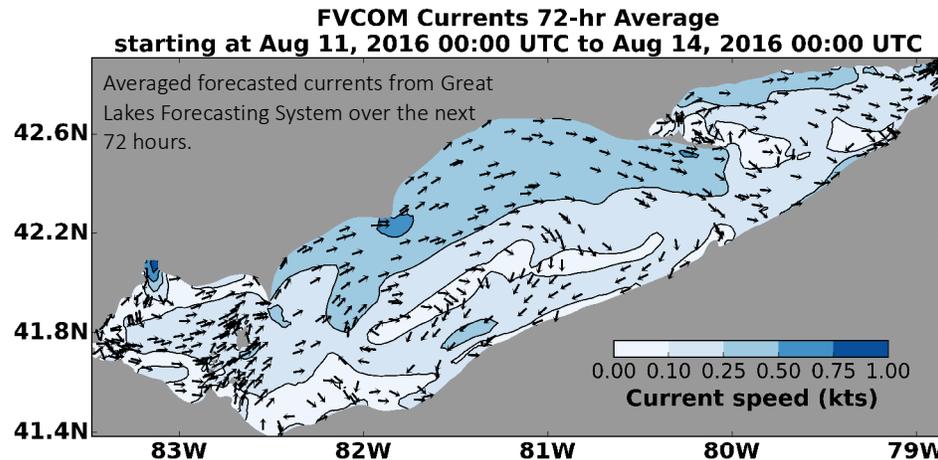


Figure 4. Forecast position of bloom for 14 August, 2016 using GLFS modelled currents to move the bloom from the 10 August, 2016 image.



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