



# Experimental Lake Erie Harmful Algal Bloom Bulletin

23 August, 2016, Bulletin 13

Strong westerly winds over the weekend moved the bulk of the cyanobacterial (*Microcystis*) bloom. Moderate to high concentrations remain in Maumee Bay, with pockets of scum present, especially toward the east side. Otherwise, moderate concentrations are now mostly in the center of the western Basin, north and west of West Sister Island. The bloom is present in low concentrations north and east of the islands, extending closer to the Ontario coast well to the east of Pelee Point. Toxin concentrations should continue to remain below recreational risk threshold outside of Maumee Bay.

Light mixing today (Tuesday), with variable moderate mixing over the next few days depending on localized storms. Southwest winds continue to favor eastward and northward movement of the bloom. In areas of dense bloom (orange and red in the image), particularly in Maumee Bay, the toxin concentration can exceed the threshold for recreational exposure. This is particularly a risk in water that looks green from a boat.

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

Keep yourself and your pets out of scums. Please check Ohio EPA's site on harmful algal blooms for safety information. <http://epa.ohio.gov/habalgae.aspx> Thunderstorms remain a greater risk. --Stumpf, Dupuy

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

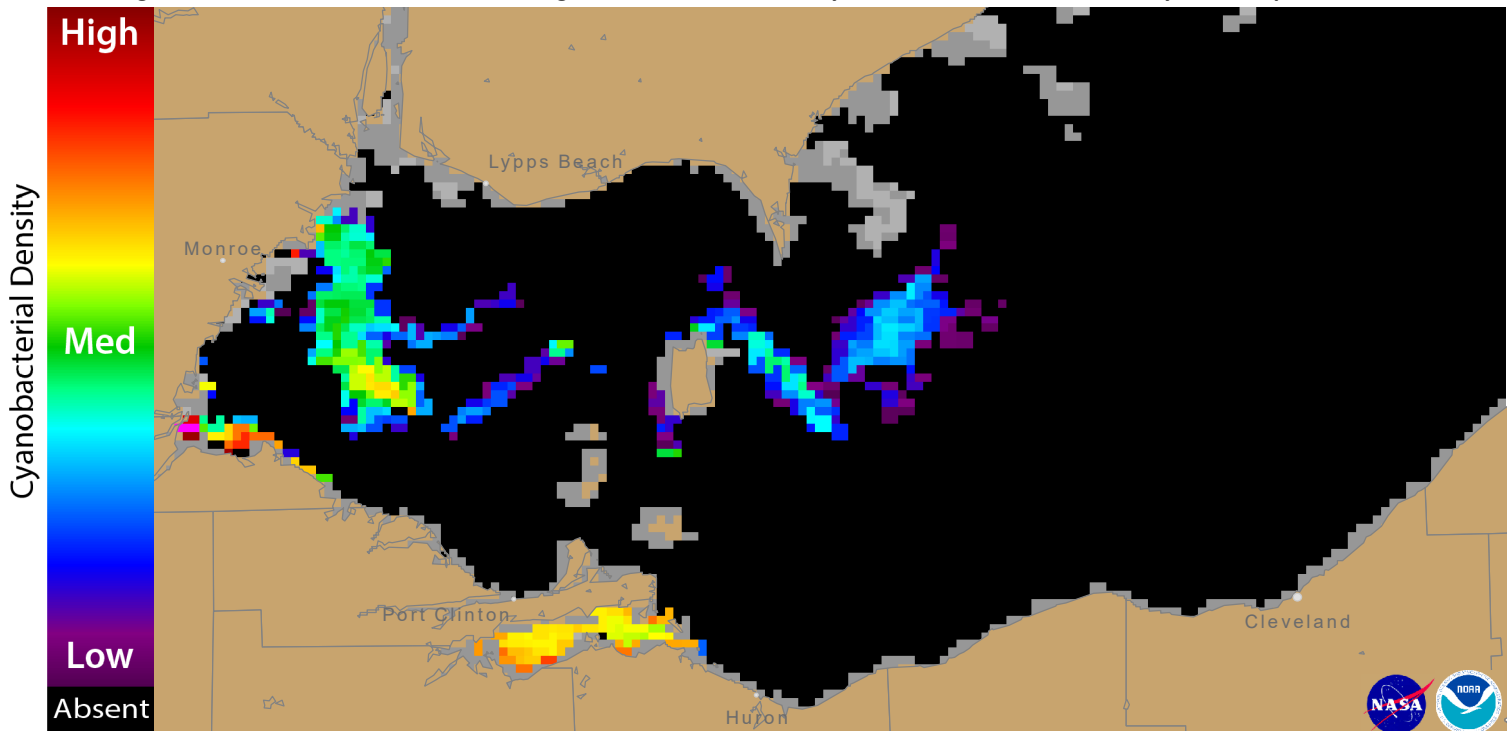


Figure 1. Cyanobacterial Index from NASA's MODIS-Aqua data collected 22 August, 2016 at 13:25 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

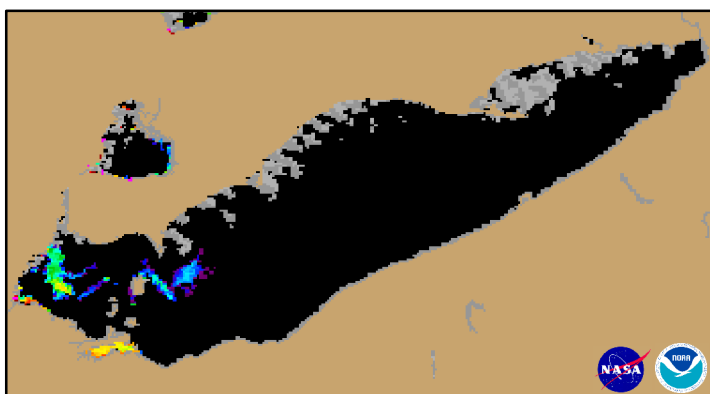
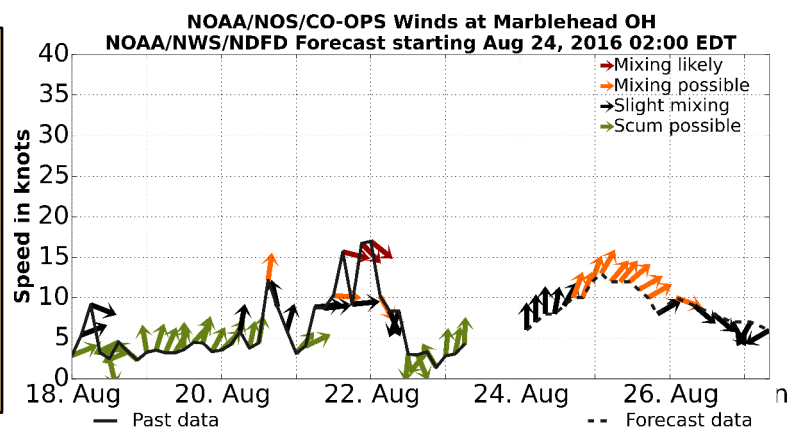


Figure 2. Cyanobacterial Index from NASA's MODIS-Aqua data collected 22 August, 2016 at 13:25.



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>

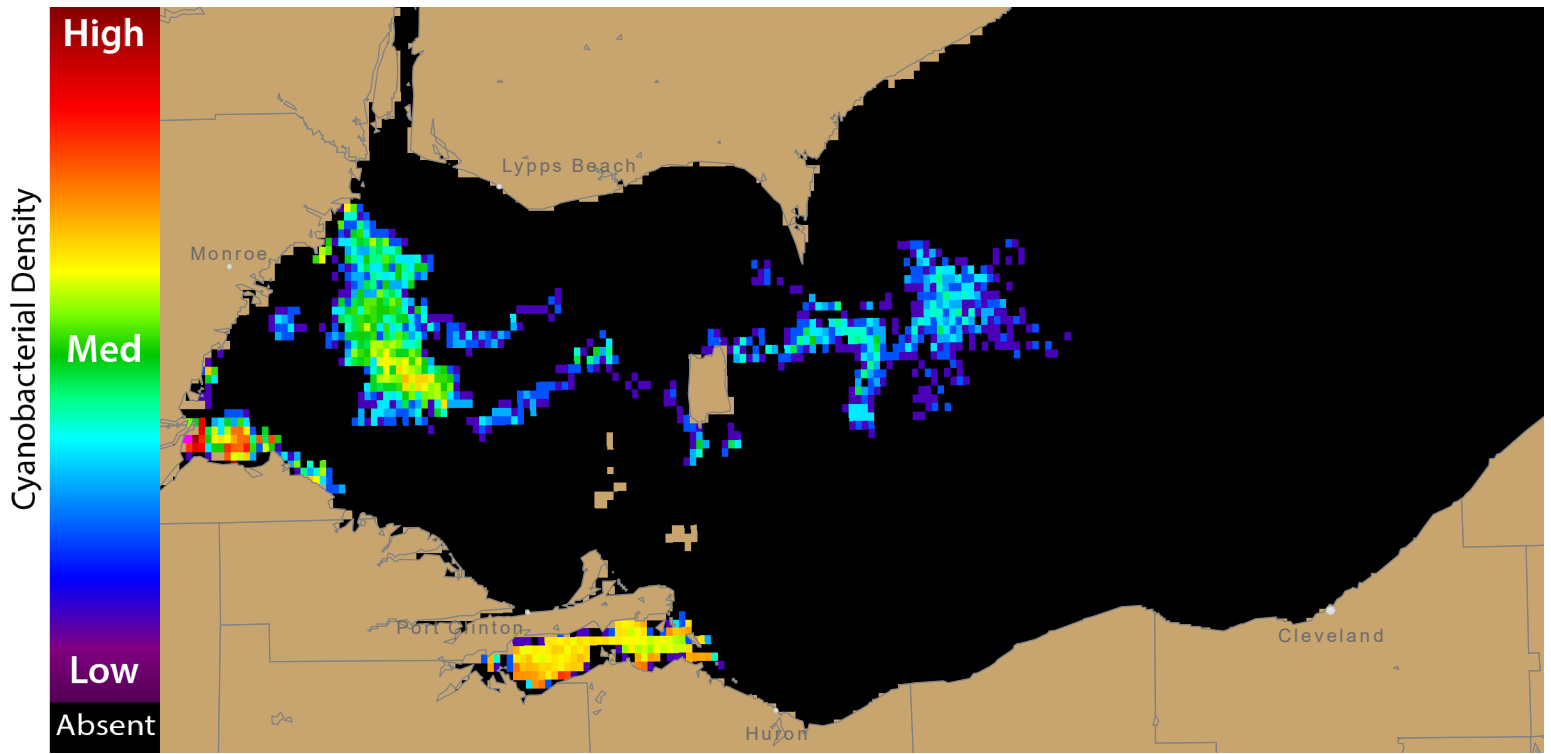


Figure 3. Nowcast position of bloom for 23 August, 2016 using GLFS modelled currents to move the bloom from the 22 August, 2016 image.

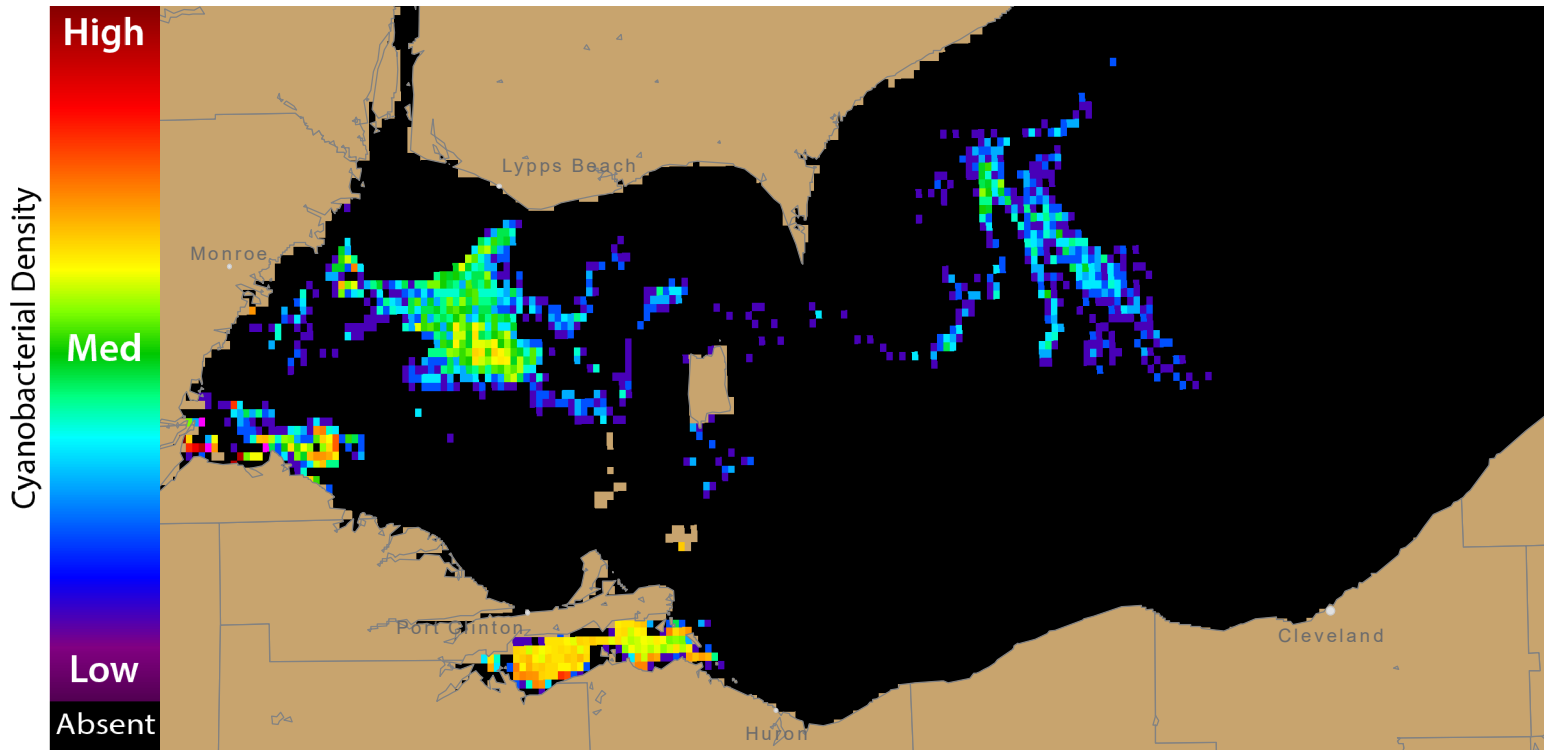
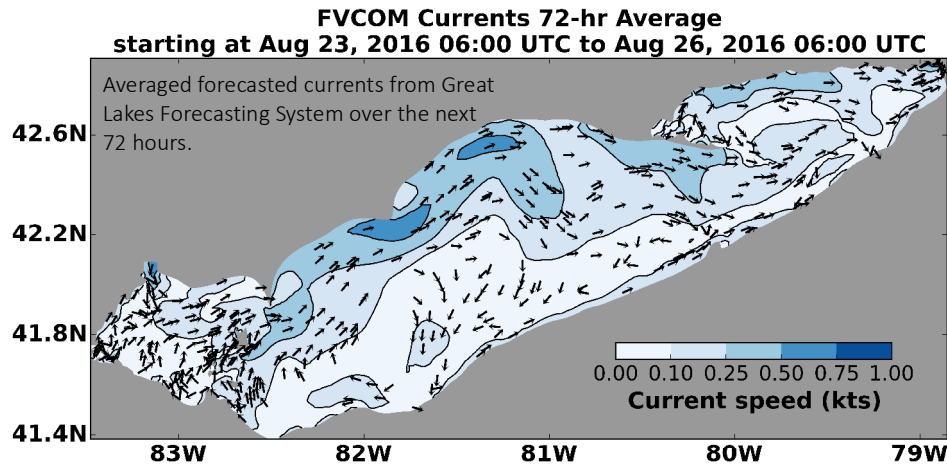


Figure 4. Forecast position of bloom for 26 August, 2016 using GLFS modelled currents to move the bloom from the 22 August, 2016 image.



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