



Experimental Lake Erie Harmful Algal Bloom Bulletin

22 September, 2016, Bulletin 22

The cyanobacterial (Microcystis) bloom has increased somewhat in intensity over the last week. This is not unusual for mid-September. The bloom is present in Maumee Bay, north and west of West Sister Island in the western Basin, north of the islands then around and past Pelee Point. Toxin concentrations in the western basin remain very low. Under calm winds (< 6 knots), scum areas were present north and west of West Sister Island and around Pelee Point. During moderate winds (> 6 knots) the bloom decreases to very low concentrations at the surface.

Some thin scum formation is possible today (Thursday) and Friday in areas of moderate to high concentrations. Moderate winds through the weekend will cause partial mixing, reducing scum presence. The densest bloom area may be near the Ontario coast east of Pelee Point through Monday. Elsewhere, the bloom is expected to continue to remain in the center of the basin away from land. Additional intensification is not expected.

The persistent cyanobacteria bloom continues in Sandusky Bay. No other blooms have been detected further east 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> Be careful boating, thunderstorms are a greater risk. --Stumpf, Tomlinson, Dupuy.

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

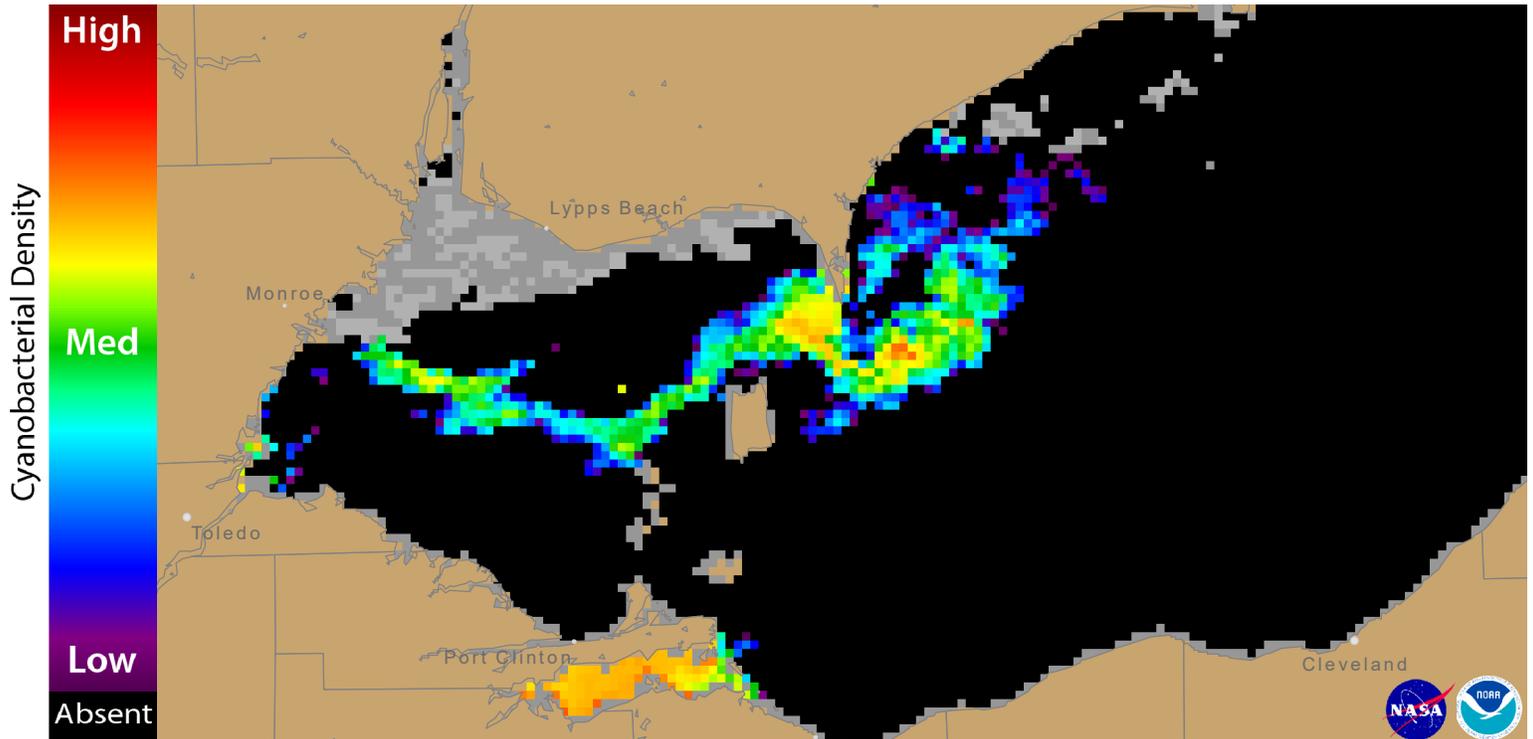


Figure 1. Cyanobacterial Index from NASA's MODIS-Aqua data collected 20 September, 2016 at 2:32 EDT. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

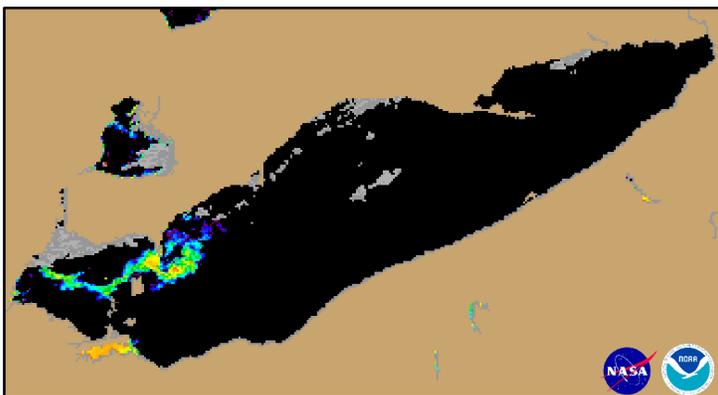
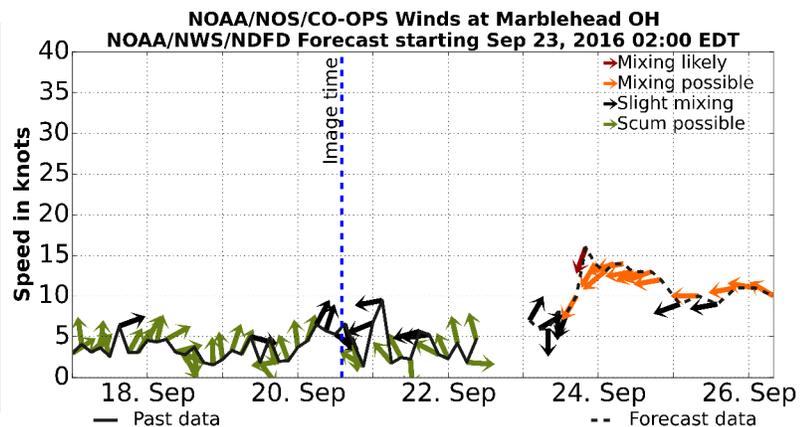


Figure 2. Cyanobacterial Index from NASA's MODIS-Aqua data collected 20 September, 2016 at 2:32.



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>

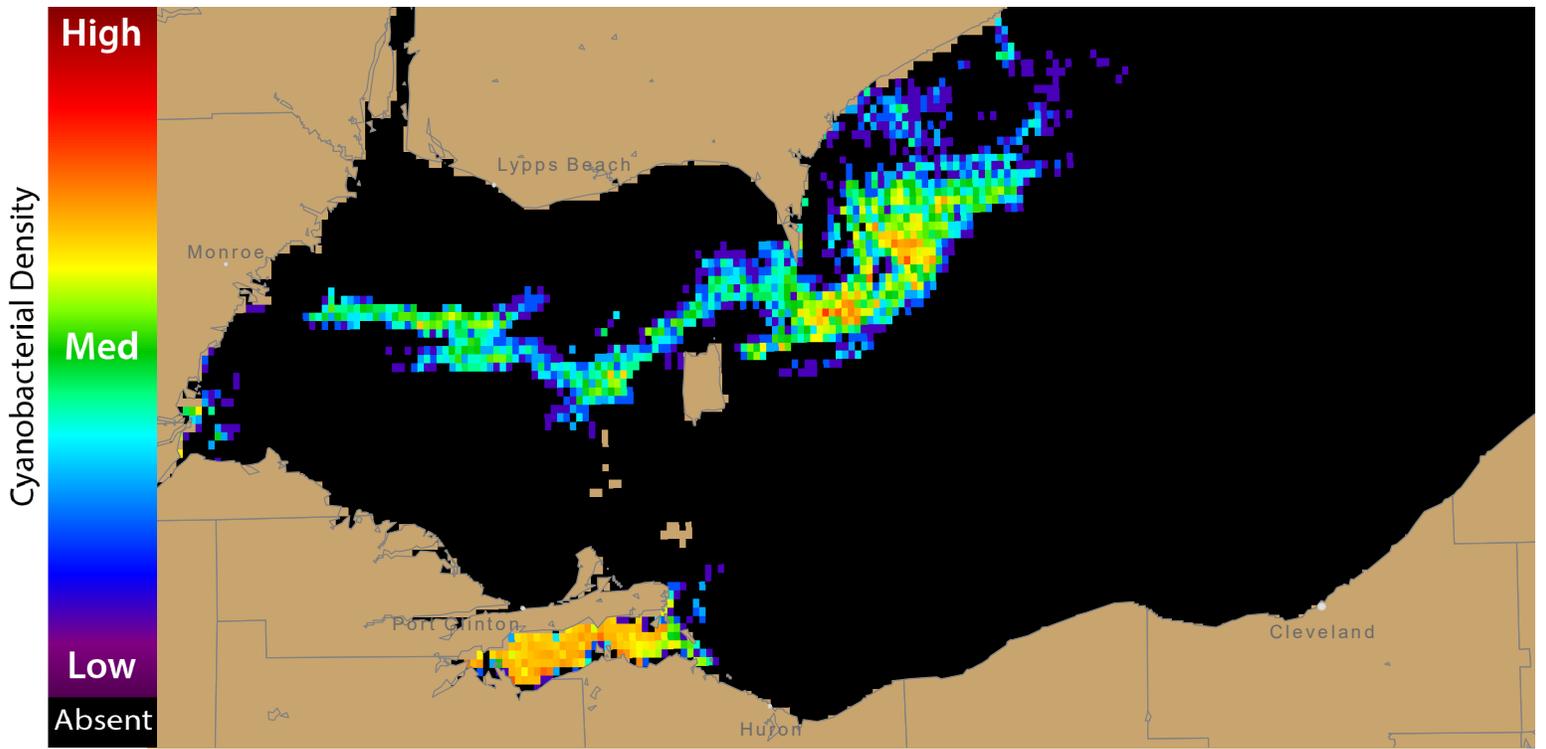


Figure 3. Nowcast position of bloom for 22 September, 2016 using GLFS modelled currents to move the bloom from the 20 September, 2016

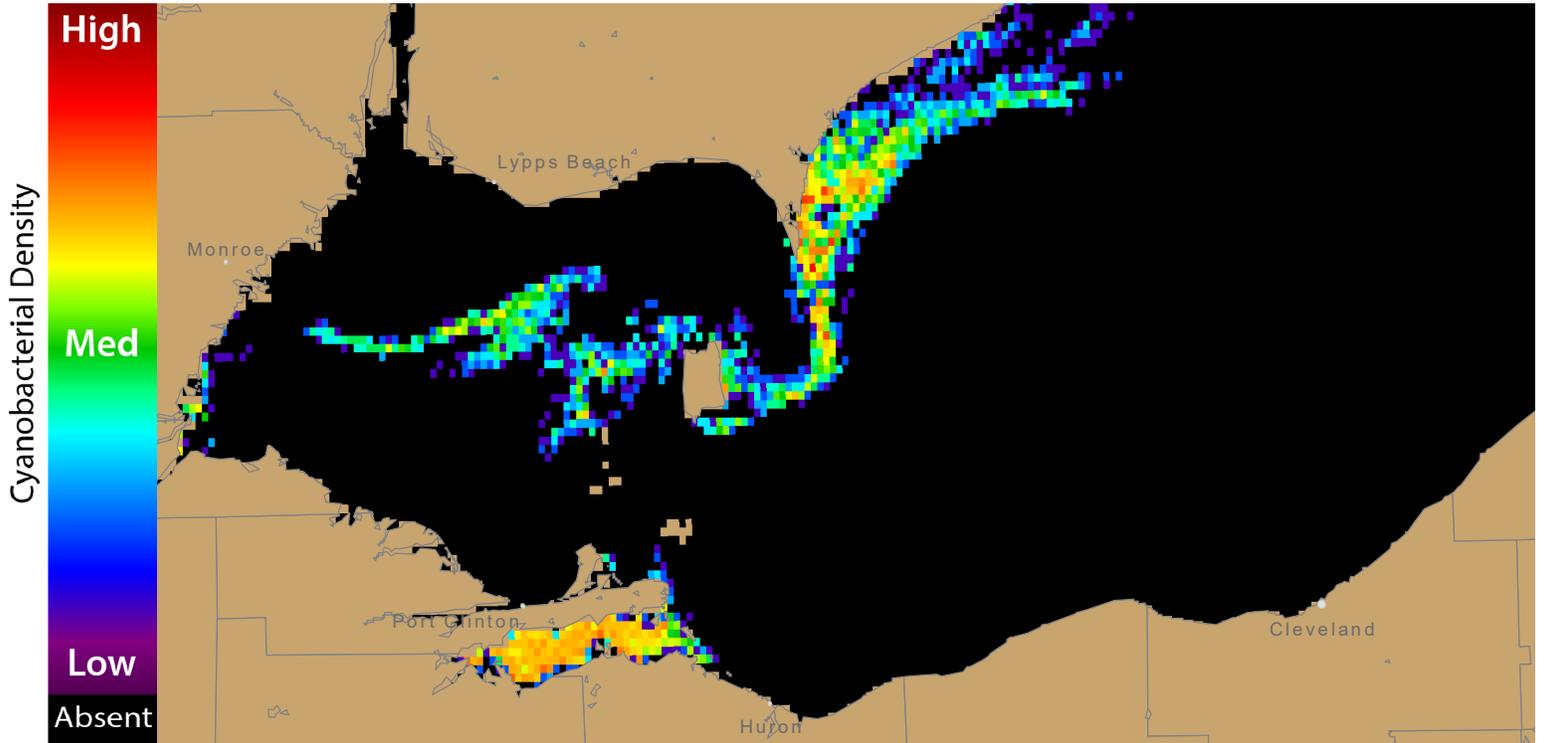
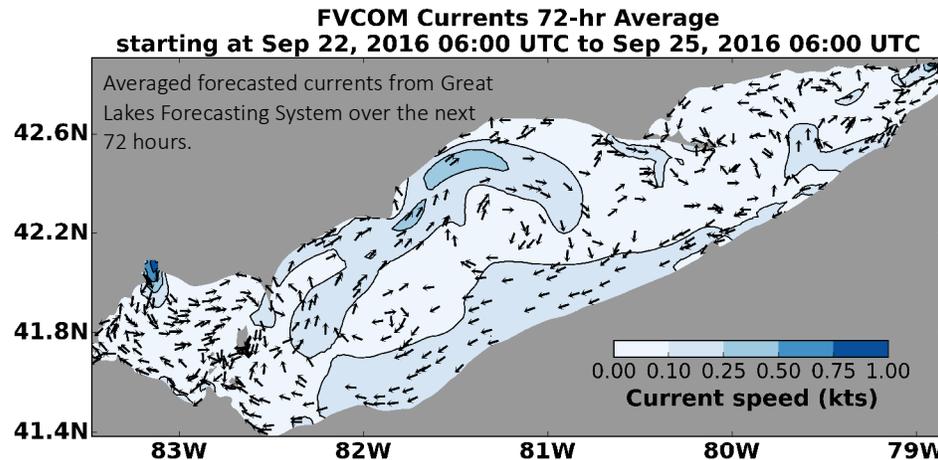


Figure 4. Forecast position of bloom for 25 September, 2016 using GLFS modelled currents to move the bloom from the 20 September, 2016



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