Experimental Lake Erie Harmful Algal Bloom Bulletin

12 September, 2016, Bulletin 19

The cyanobacterial (*Microcystis*) bloom continues. Strong winds (up to 20 knots) on Sunday caused strong mixing, reducing the surface concentration to below detection levels in most areas except Maumee Bay.

Mild winds will lead to reduced mixing today and tomorrow; cyanobacteria will likely reappear in low to moderate concentration patches away from shore in western Lake Erie. Small patches of scum are possible in and to the north of Maumee Bay. Moderate mixing may occur Wed and Thurs with somewhat stronger winds.

The persistent cyanobacteria bloom continues in Sandusky Bay. No other blooms have been detected further east 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 Keep yourself and your pets out of scums. Be careful boating. --Stumpf, Dupuy

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

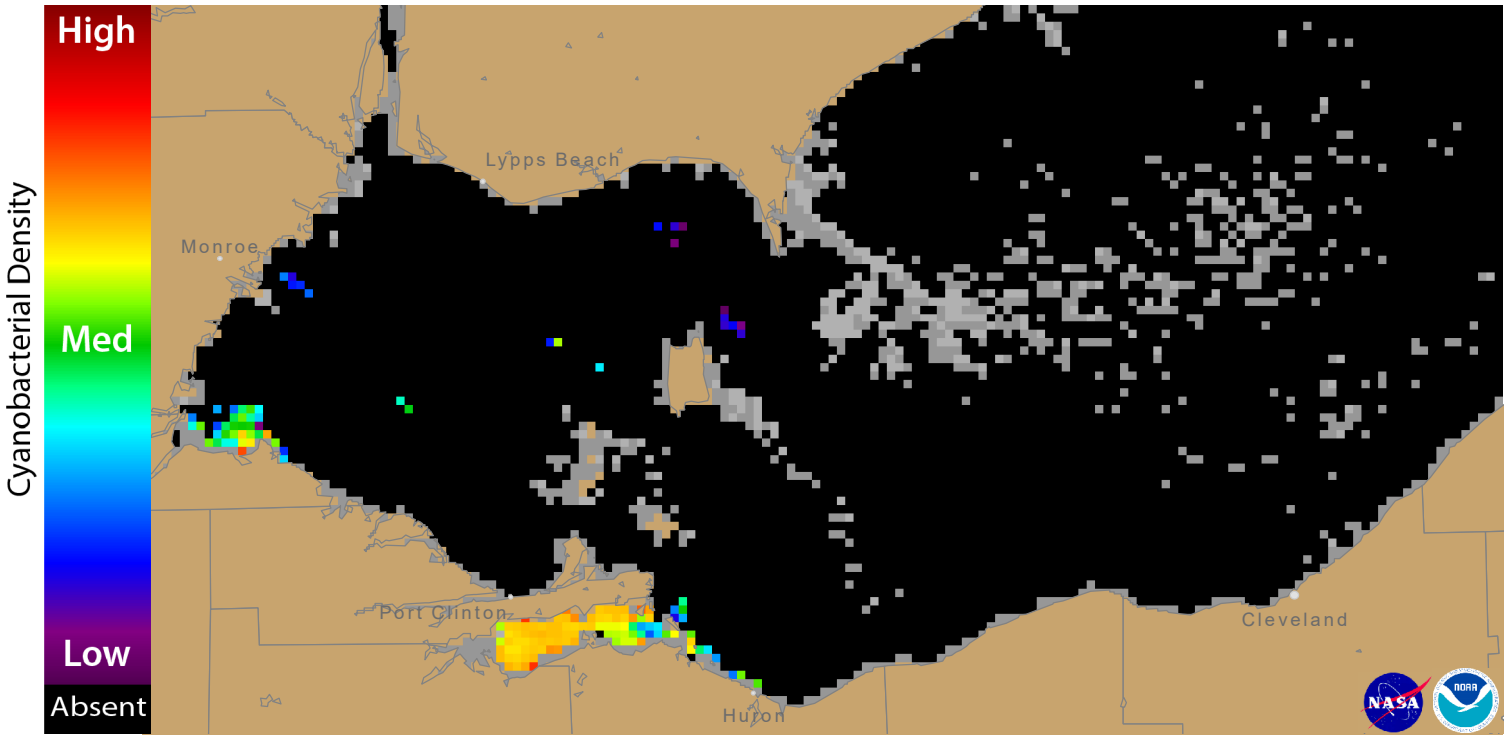


Figure 1. Cyanobacterial Index from NASA's MODIS-Aqua data collected 11 September, 2016 at 13:01 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

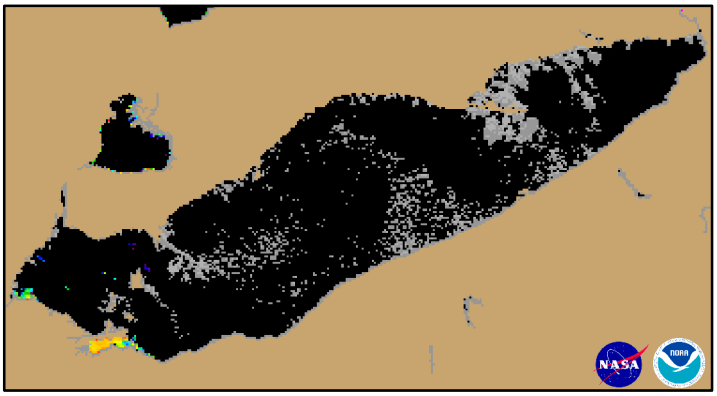
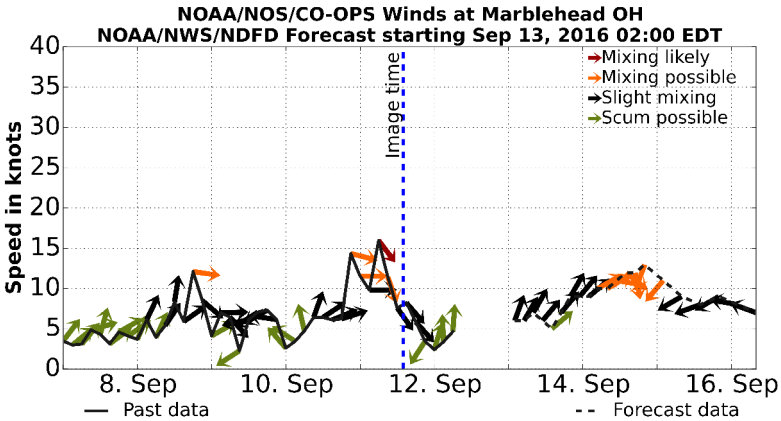


Figure 2. Cyanobacterial Index from NASA's MODIS-Aqua data collected 11 September, 2016 at 13:01.



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

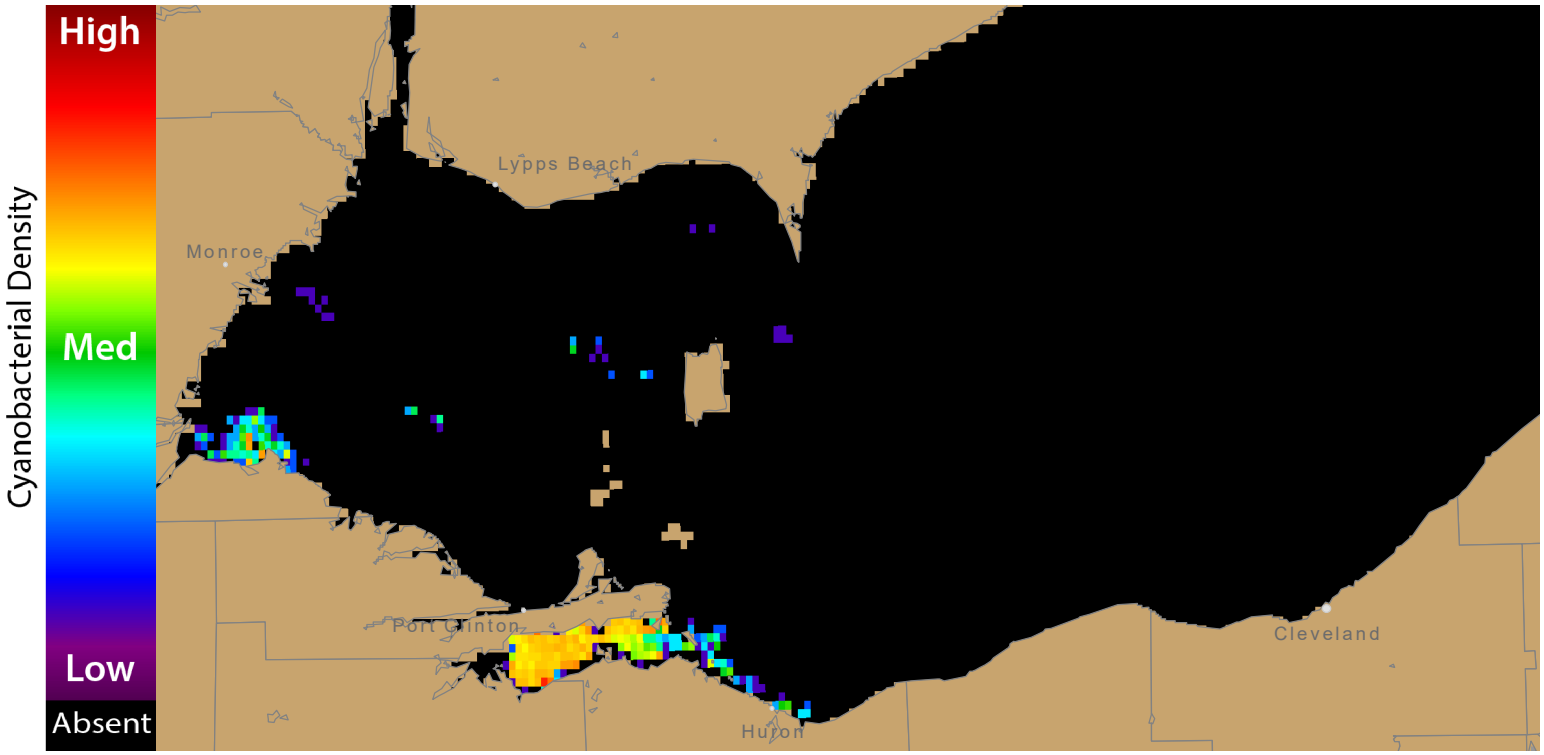


Figure 3. Nowcast position of bloom for 12 September, 2016 using GLFS modelled currents to move the bloom from the 11 September, 2016

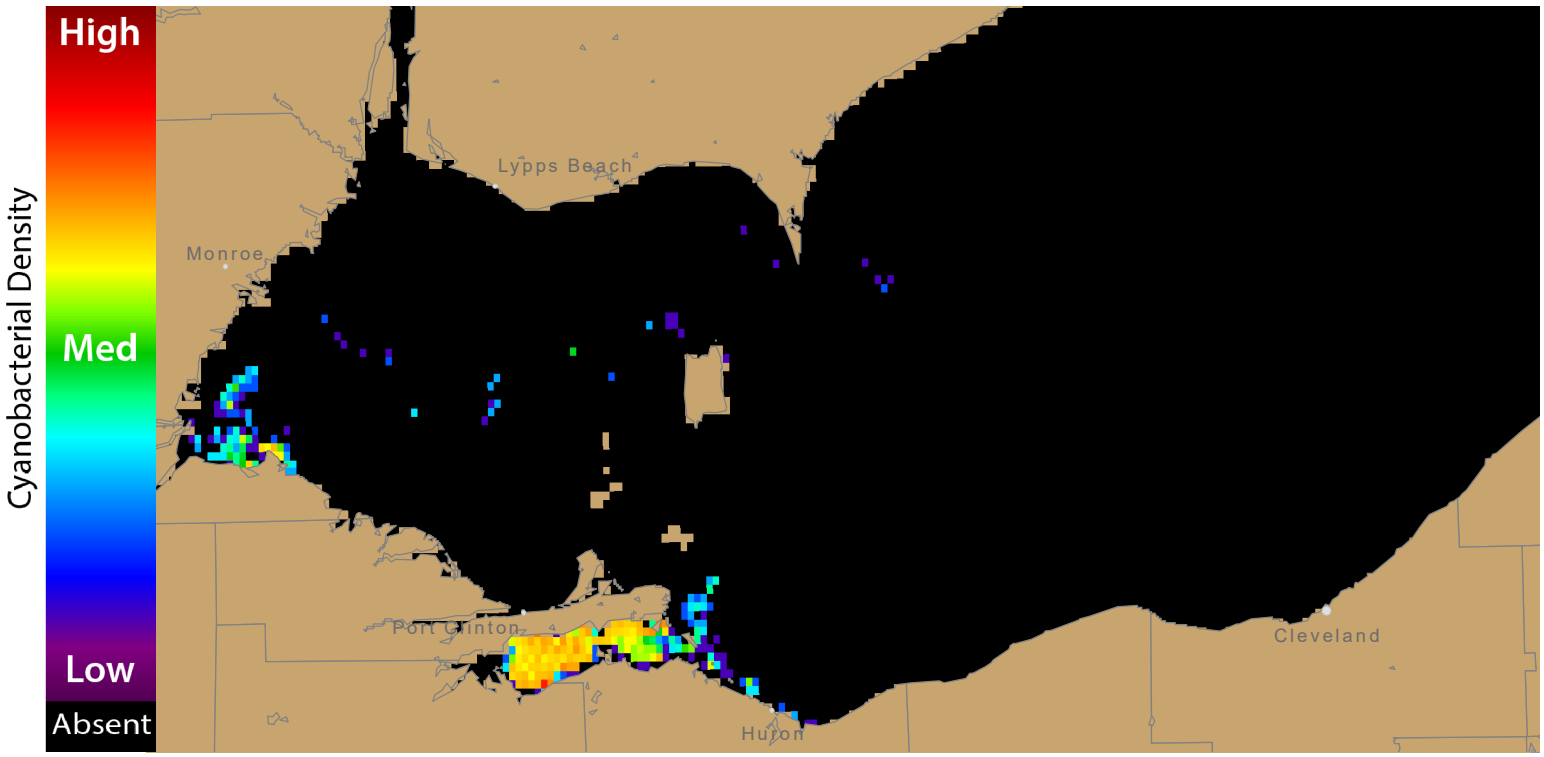
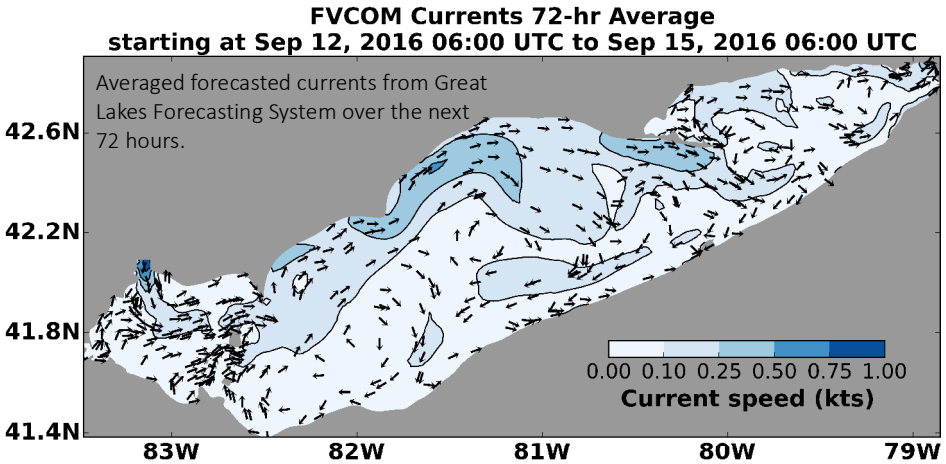


Figure 4. Forecast position of bloom for 15 September, 2016 using GLFS modelled currents to move the bloom from the 11 September, 2016



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