



Experimental Lake Erie Harmful Algal Bloom Bulletin

08 September, 2016, Bulletin 18

The cyanobacterial (*Microcystis*) bloom continues in patches of low to moderate concentration away from shore in western Lake Erie, except some areas of moderate to high concentrations present within and north of Maumee Bay. Cyanobacteria is also present at low concentrations (confirmed by OSU Stone Lab) in the basin east of Sandusky and west of Cleveland. Mild winds produced only slight mixing the past few days.

Friday is forecast to be calm. Today, and over the weekend, brisk winds should bring strong mixing, causing very low surface concentrations. Eastward transport is expected over the weekend. While some toxins are present, the concentration should be below recreational risk thresholds in most areas, except in any scums that may form on Friday. On Friday during calm winds, bloom patches may appear north of the islands.

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"

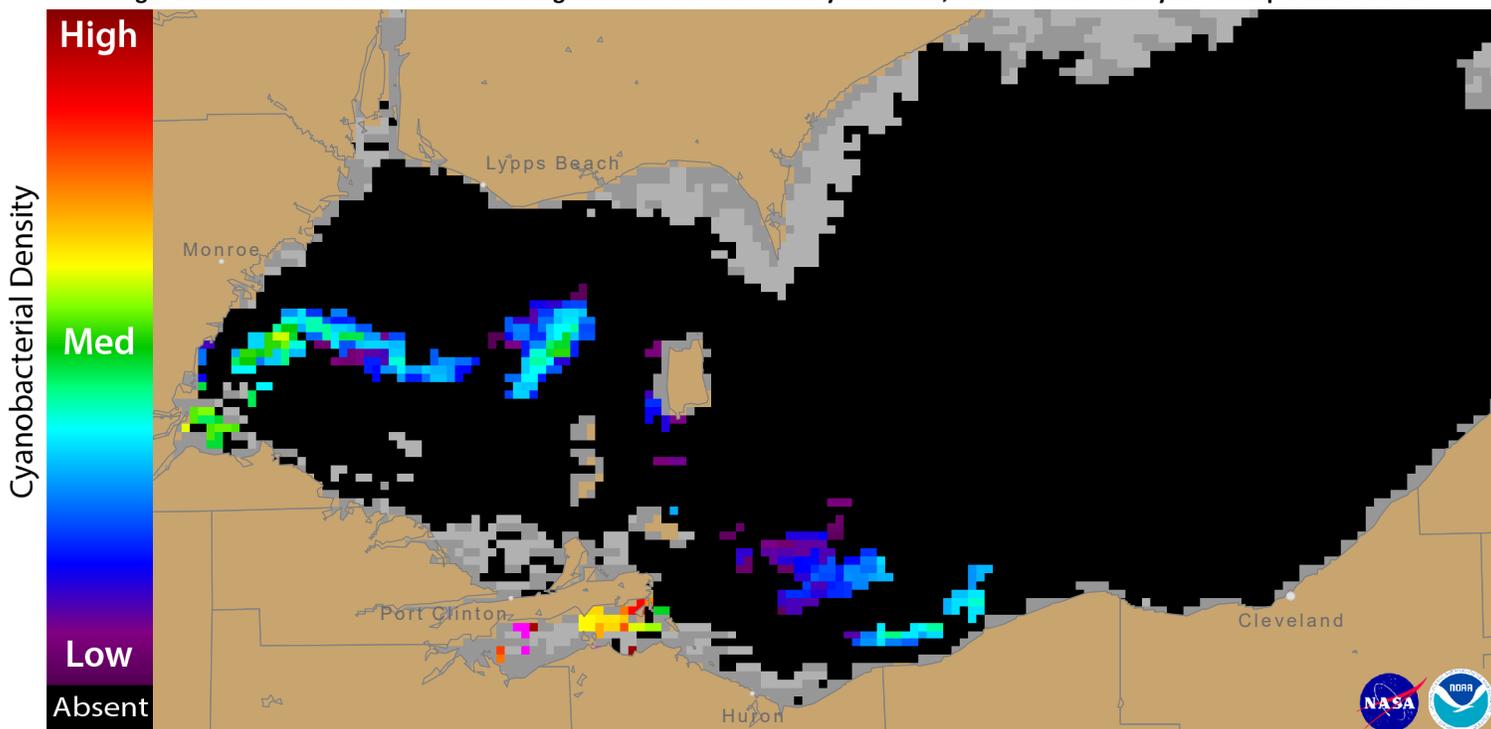


Figure 1. Cyanobacterial Index from NASA's MODIS-Aqua data collected 07 September, 2016 at 13:25 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

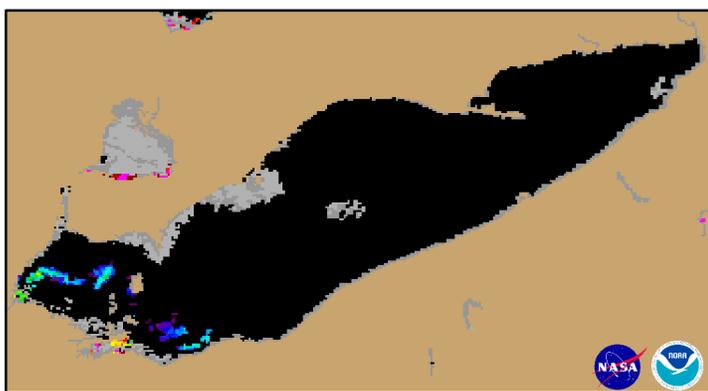
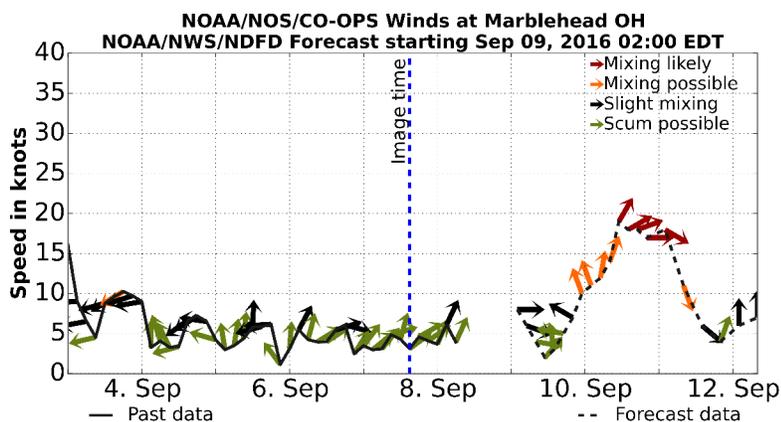


Figure 2. Cyanobacterial Index from NASA's MODIS-Aqua data collected 07 September, 2016 at 13:25.



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>

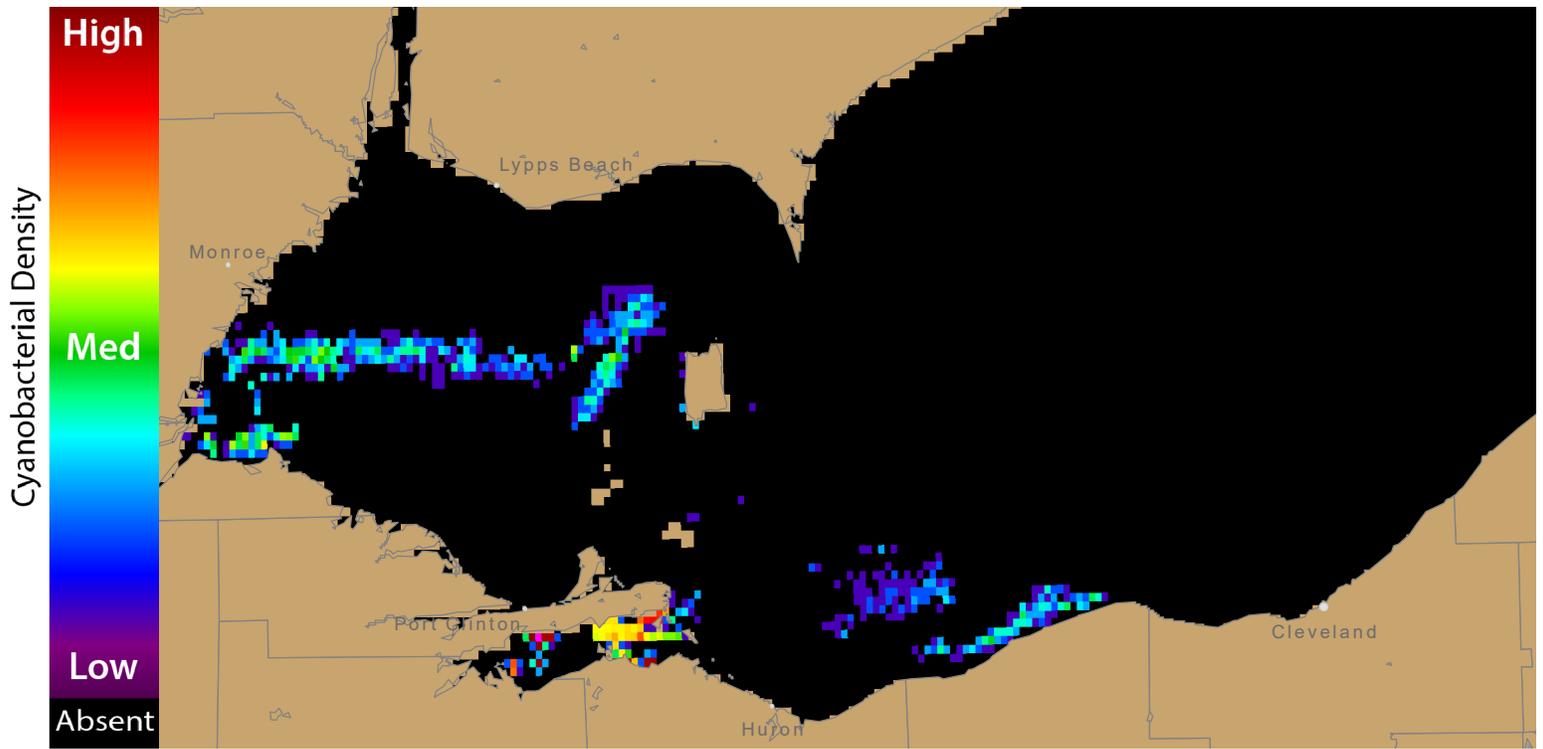


Figure 3. Nowcast position of bloom for 08 September, 2016 using GLFS modelled currents to move the bloom from the 07 September, 2016

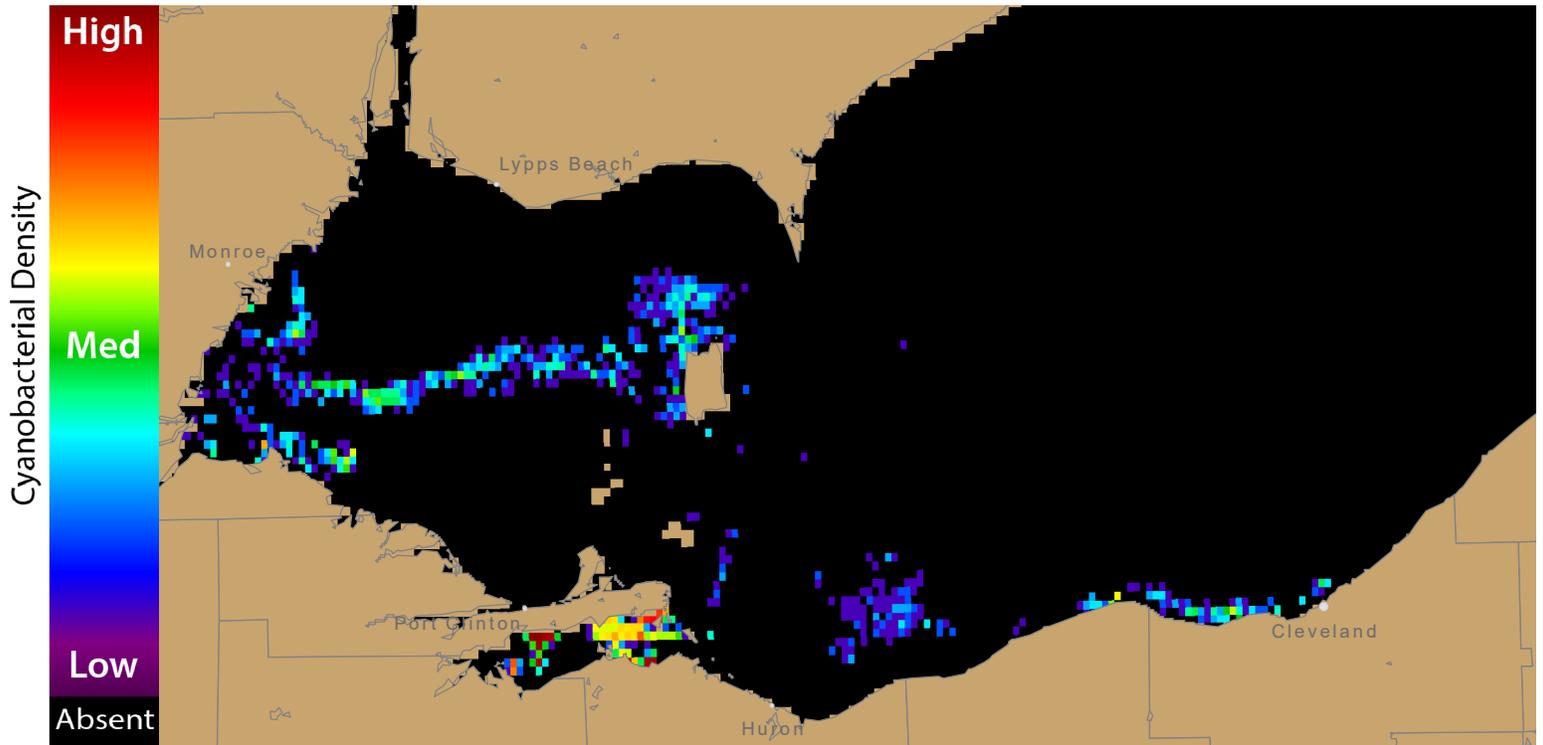
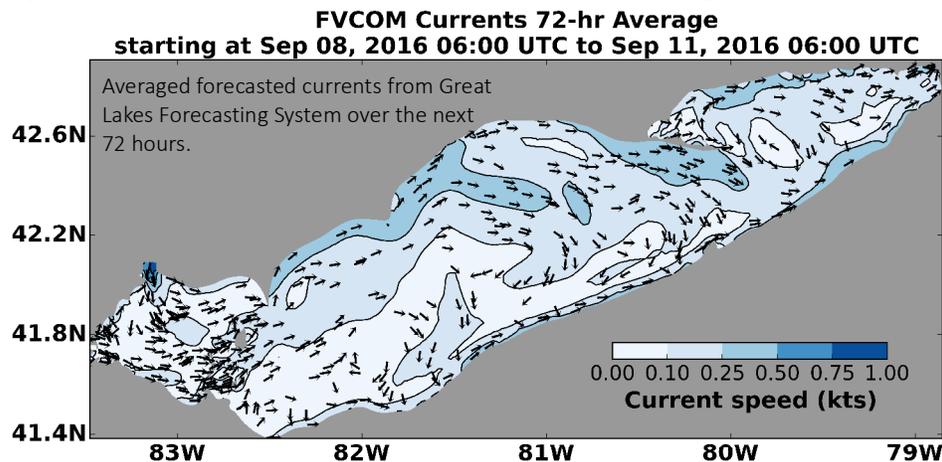


Figure 4. Forecast position of bloom for 11 September, 2016 using GLFS modelled currents to move the bloom from the 07 September, 2016



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