



# Experimental Lake Erie Harmful Algal Bloom Bulletin

26 September, 2016, Bulletin 23

The cyanobacterial (*Microcystis*) bloom was present near West Sister Island and to the east of the islands and Pelee Point over the last few days. Strong winds on the weekend caused extensive mixing, substantially reducing the surface concentration in all areas. In many areas only slight discoloration occurred. Toxin concentrations in the western basin remain very low.

Moderate to strong winds this week will keep the bloom mixed in the water column, and will result in low concentrations in all areas. Strong westerly winds will push the densest area of the bloom (that has been nearer to Pelee Point) out into the central basin away from land. While the bloom may reappear in patchy areas in the western basin when calm weather returns, decline of the bloom after this week is likely.

The persistent cyanobacteria bloom continues in Sandusky Bay. Please check Ohio EPA's site on harmful algal blooms for safety information. <http://epa.ohio.gov/habalgae.aspx> With strong winds, be careful boating. --Stumpf, Dupuy.

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

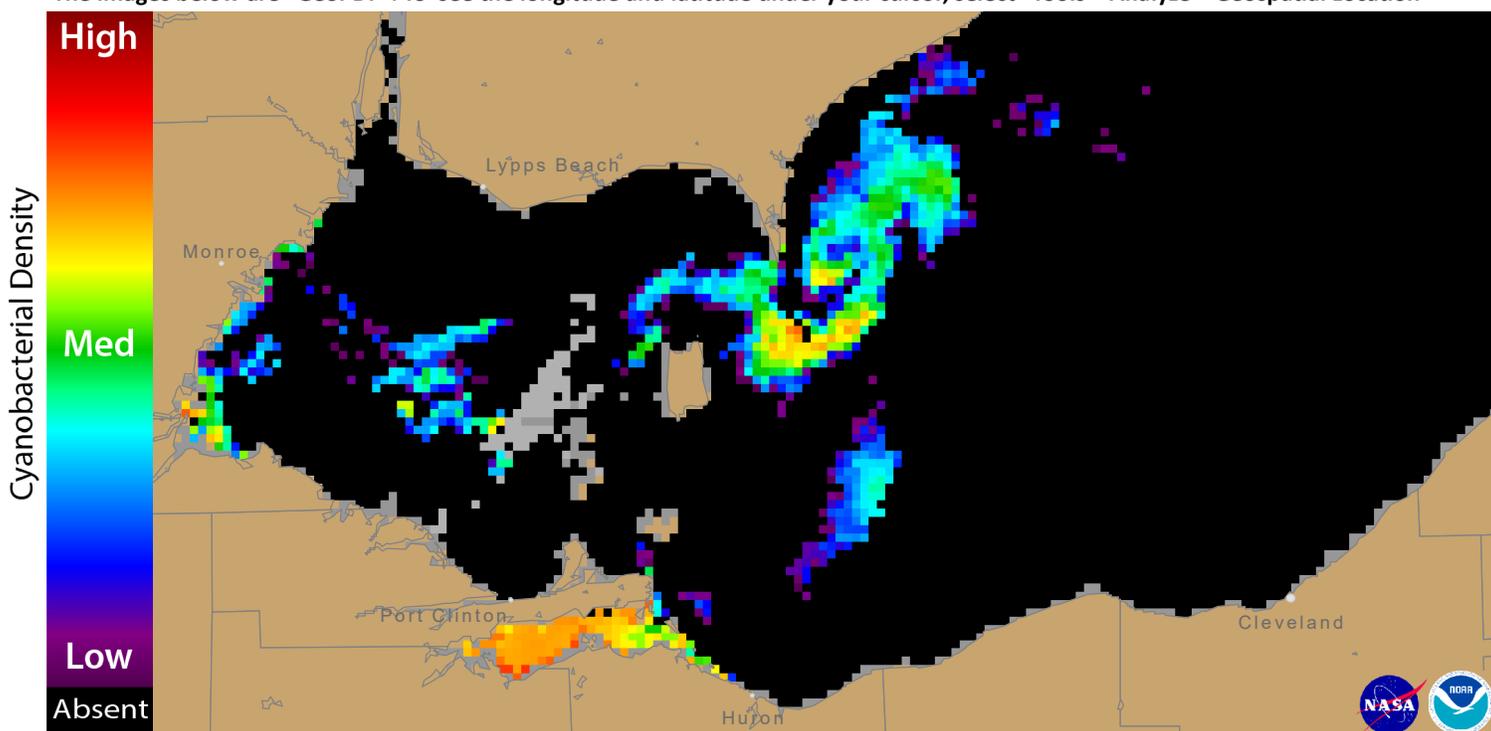


Figure 1. Cyanobacterial Index from NASA's MODIS-Aqua & Terra data collected 22 September, 2016 at 14:20 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

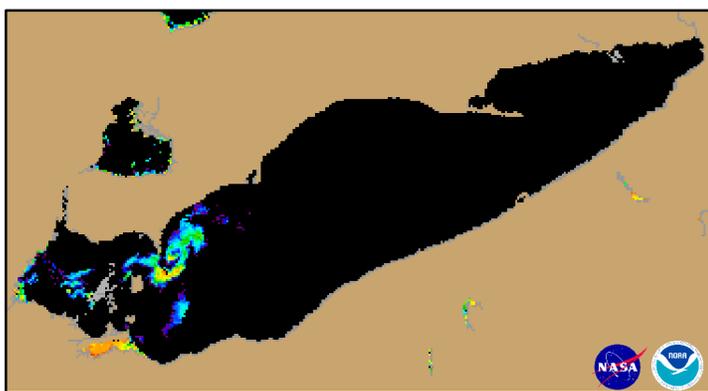
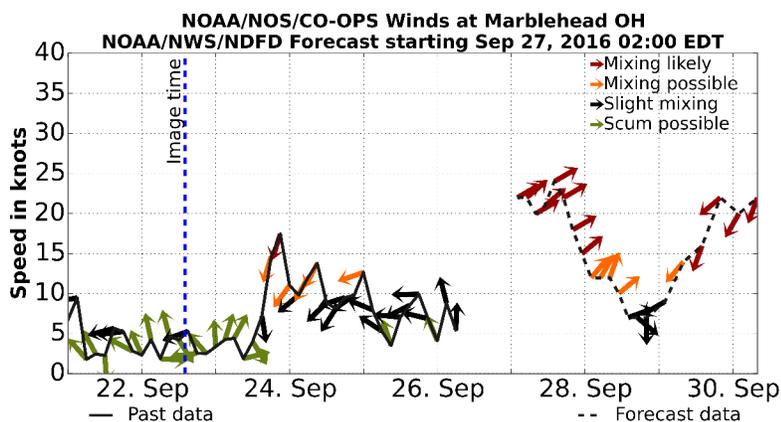


Figure 2. Cyanobacterial Index from NASA's MODIS-Aqua & Terra data collected 22 September, 2016 at 14:20.



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>

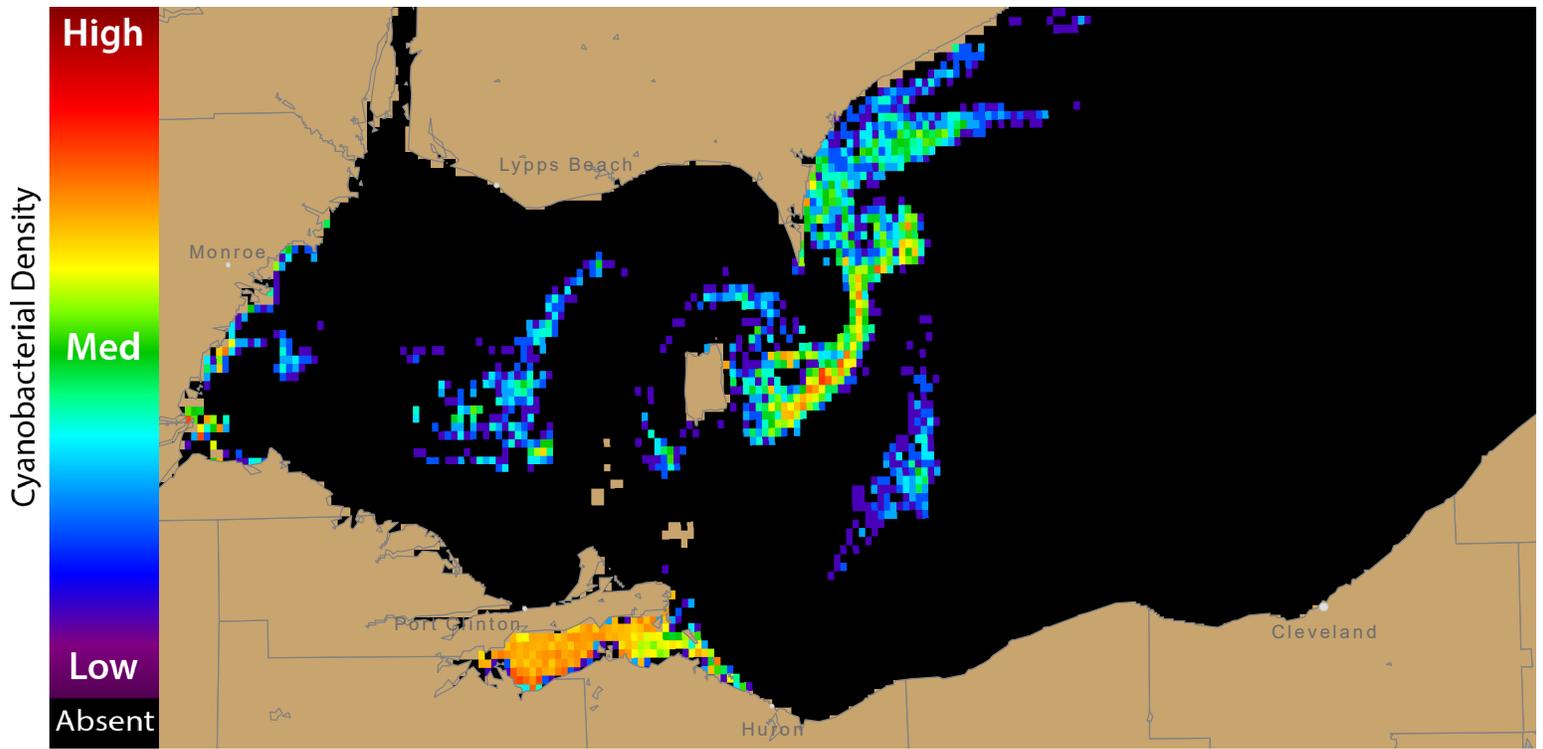


Figure 3. Nowcast position of bloom for 26 September, 2016 using GLFS modelled currents to move the bloom from the 22 September, 2016

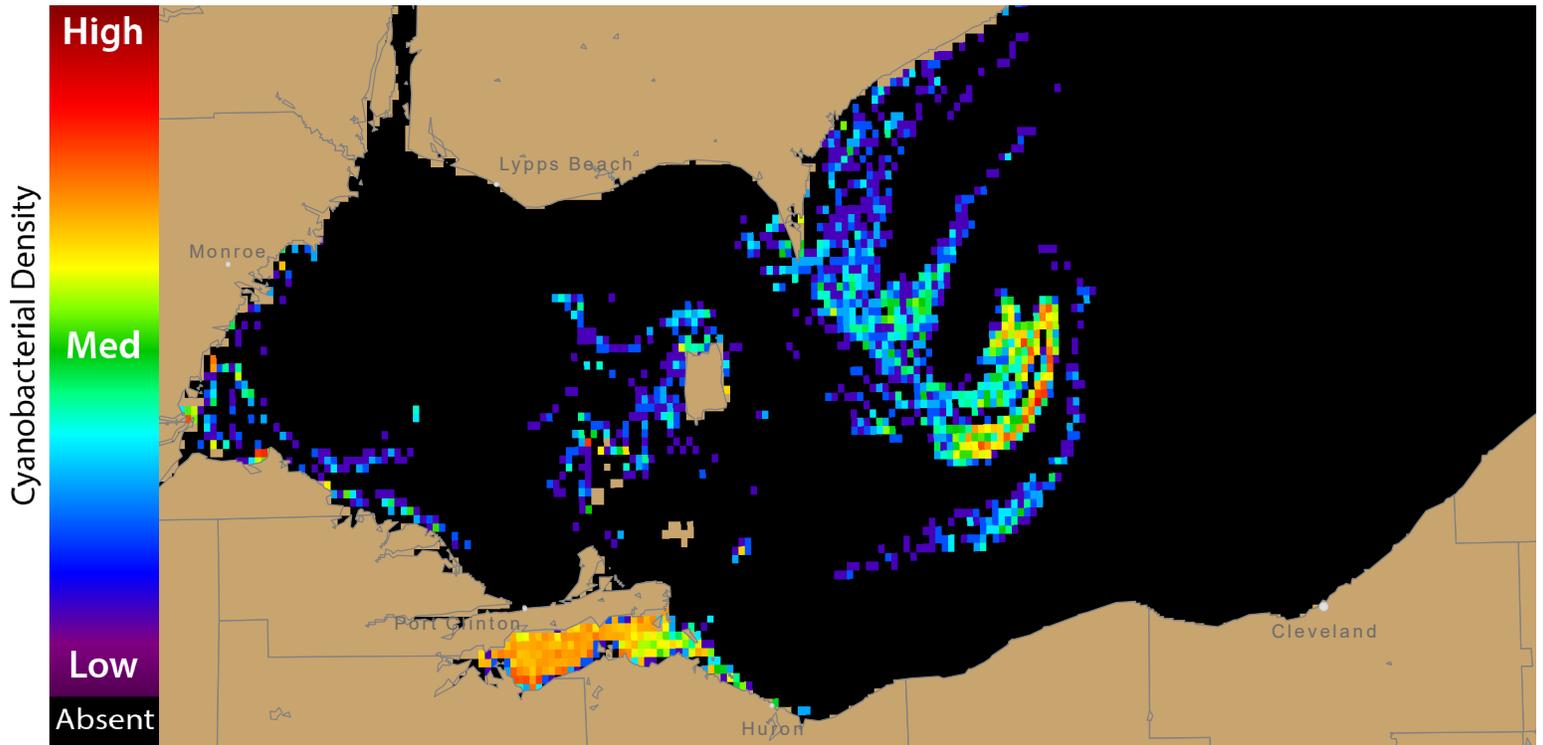
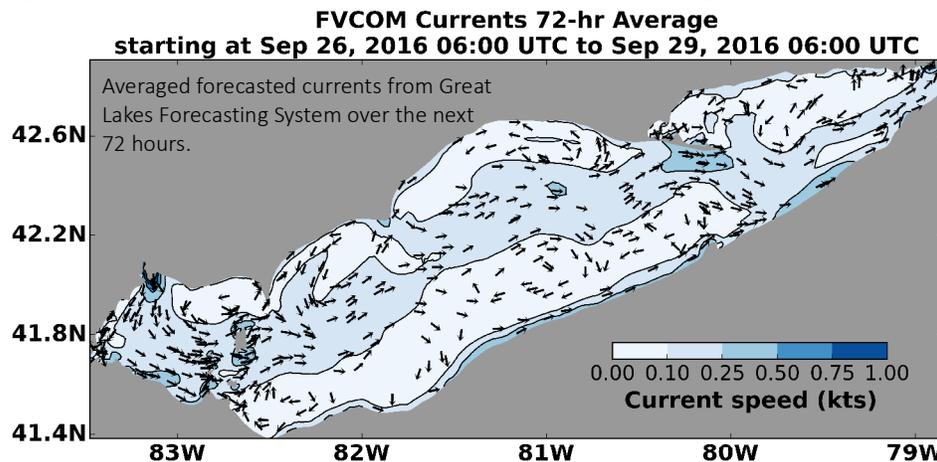


Figure 4. Forecast position of bloom for 29 September, 2016 using GLFS modelled currents to move the bloom from the 22 September, 2016



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