Lake Erie Harmful Algal Bloom Bulletin

16 October, 2017, Bulletin LE

The *Microcystis* cyanobacteria bloom continues across the western basin from Maumee Bay to along the Ontario coast. Measured toxin concentrations are below recreational thresholds throughout the bloom extent.

Forecast winds (5-20kn) today through Thursday (10/16-19) will promote mixing and westerly transport of remaining *Microcystis* concentrations. Water temperatures are below 68˚F (20˚C), limiting the growth of *Microcystis* concentrations in the western basin.

Please check Ohio EPA's site on harmful algal blooms for safety information: http://epa.ohio.gov/habalgae.aspx. NOAA's GLERL provides additional HAB data: https://www.glerl.noaa.gov/res/HABs_and_Hypoxia. Keep your pets and yourself out of the water in areas where scum is present. The persistent cyanobacteria bloom in Sandusky Bay continues. No other blooms are evident in the central or eastern basins.

–Yang, Kavanaugh

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

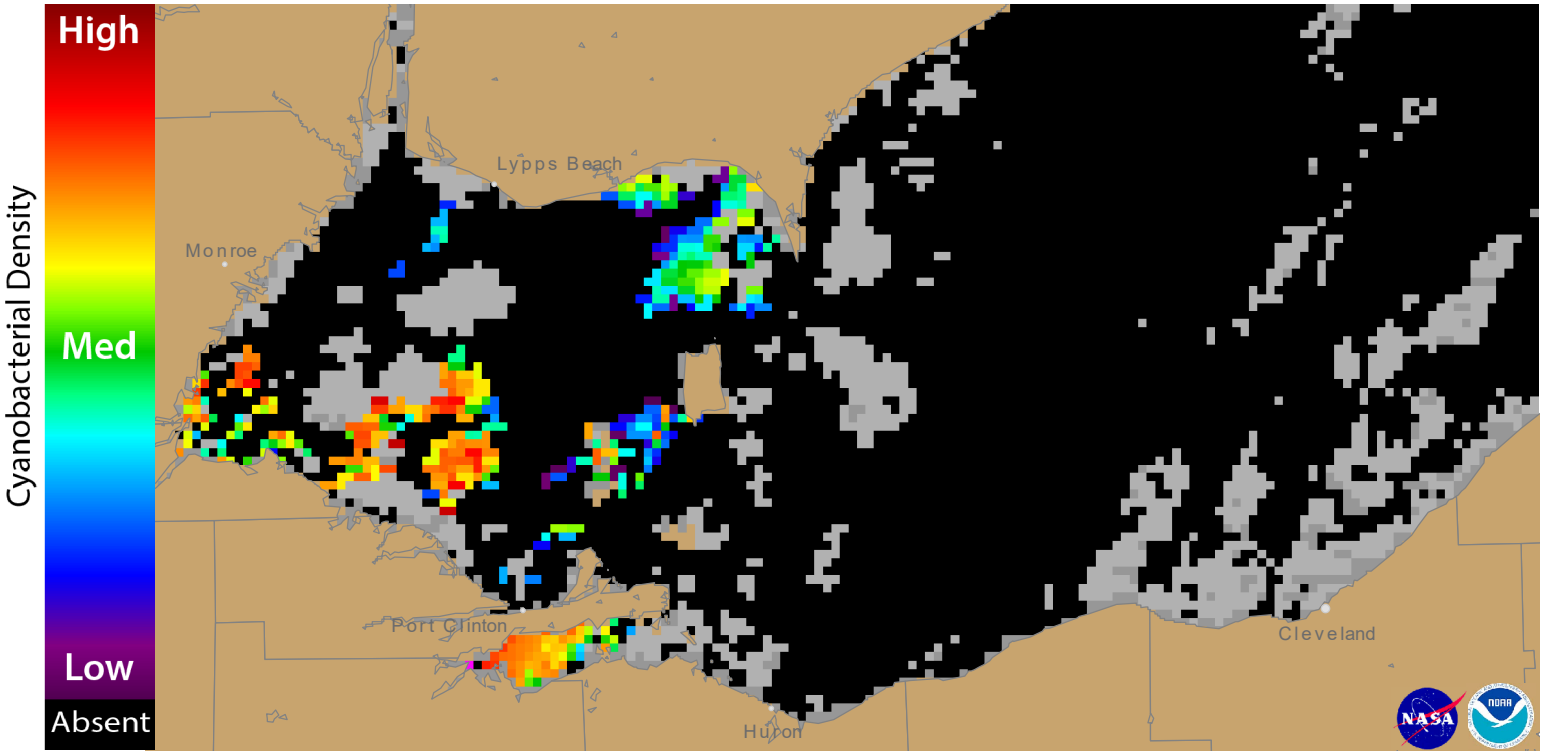


Figure 1. Cyanobacterial Index from NASA MODIS-Terra & Aqua data collected 13 October, 2017 at 12:26 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

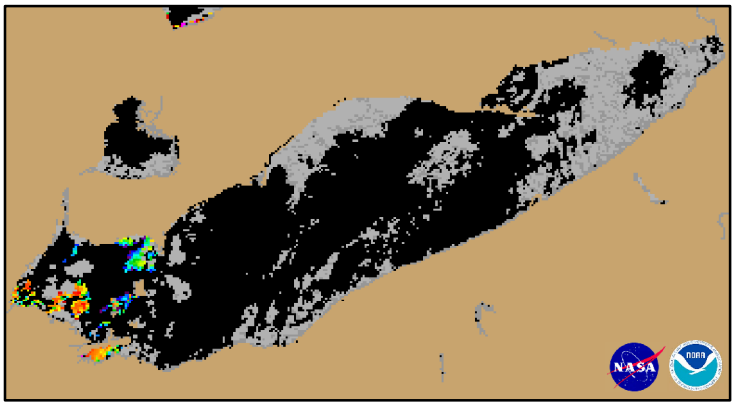
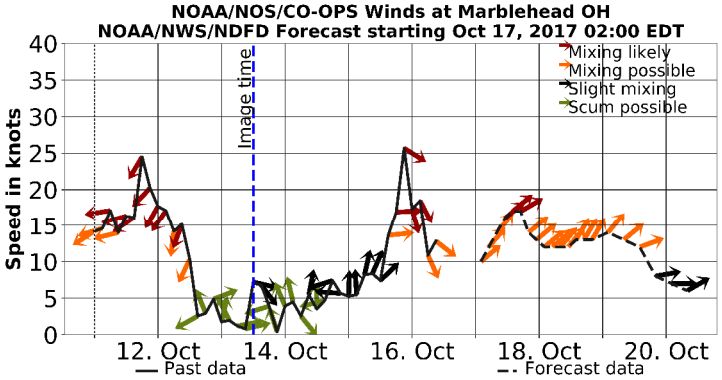


Figure 2. Cyanobacterial Index from NASA MODIS-Terra & Aqua data collected 13 October, 2017 at 12:26.



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: https://tidesandcurrents.noaa.gov/hab/lakeerie.html

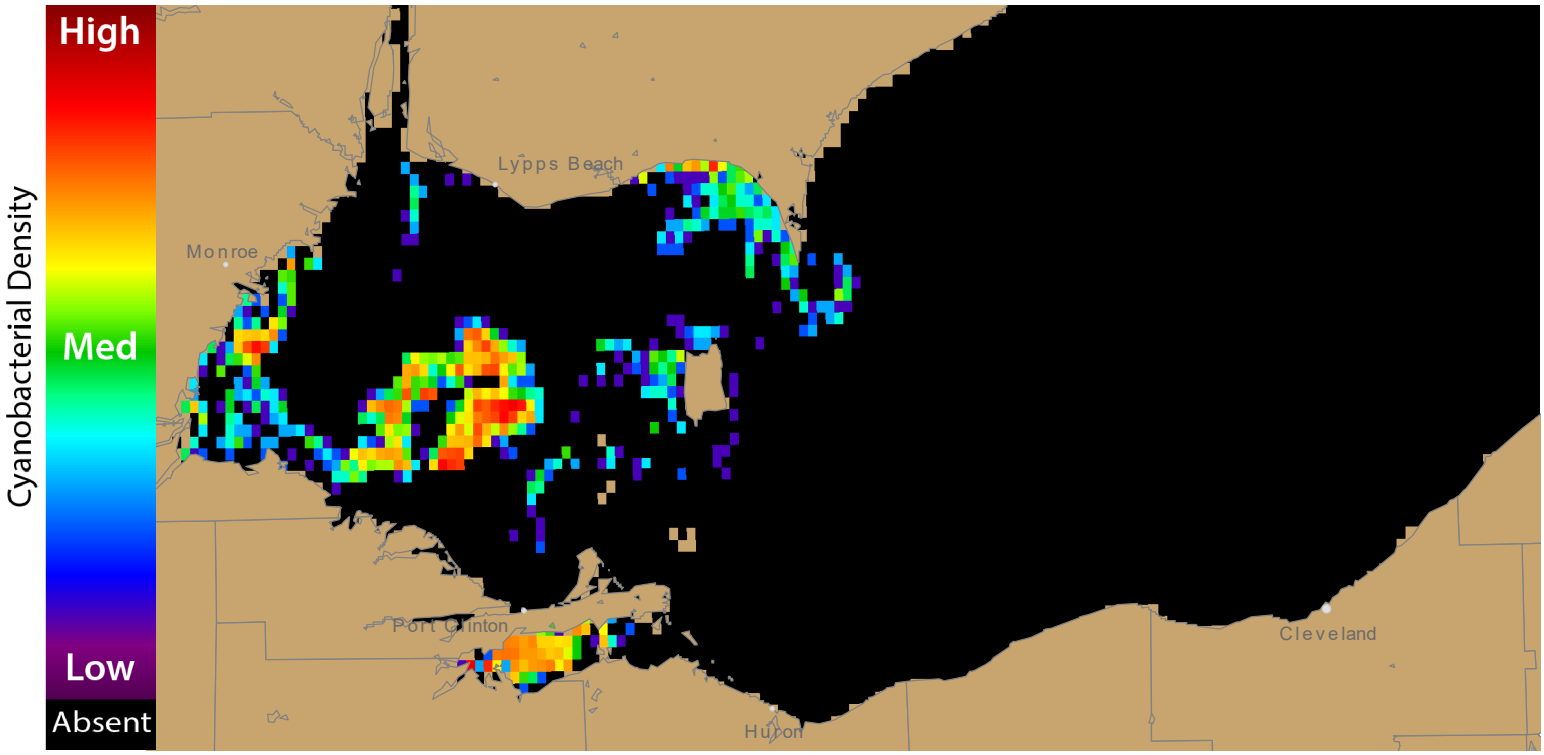


Figure 3. Nowcast position of bloom for 16 October, 2017 using GLFS modelled currents to move the bloom from the 13 October, 2017

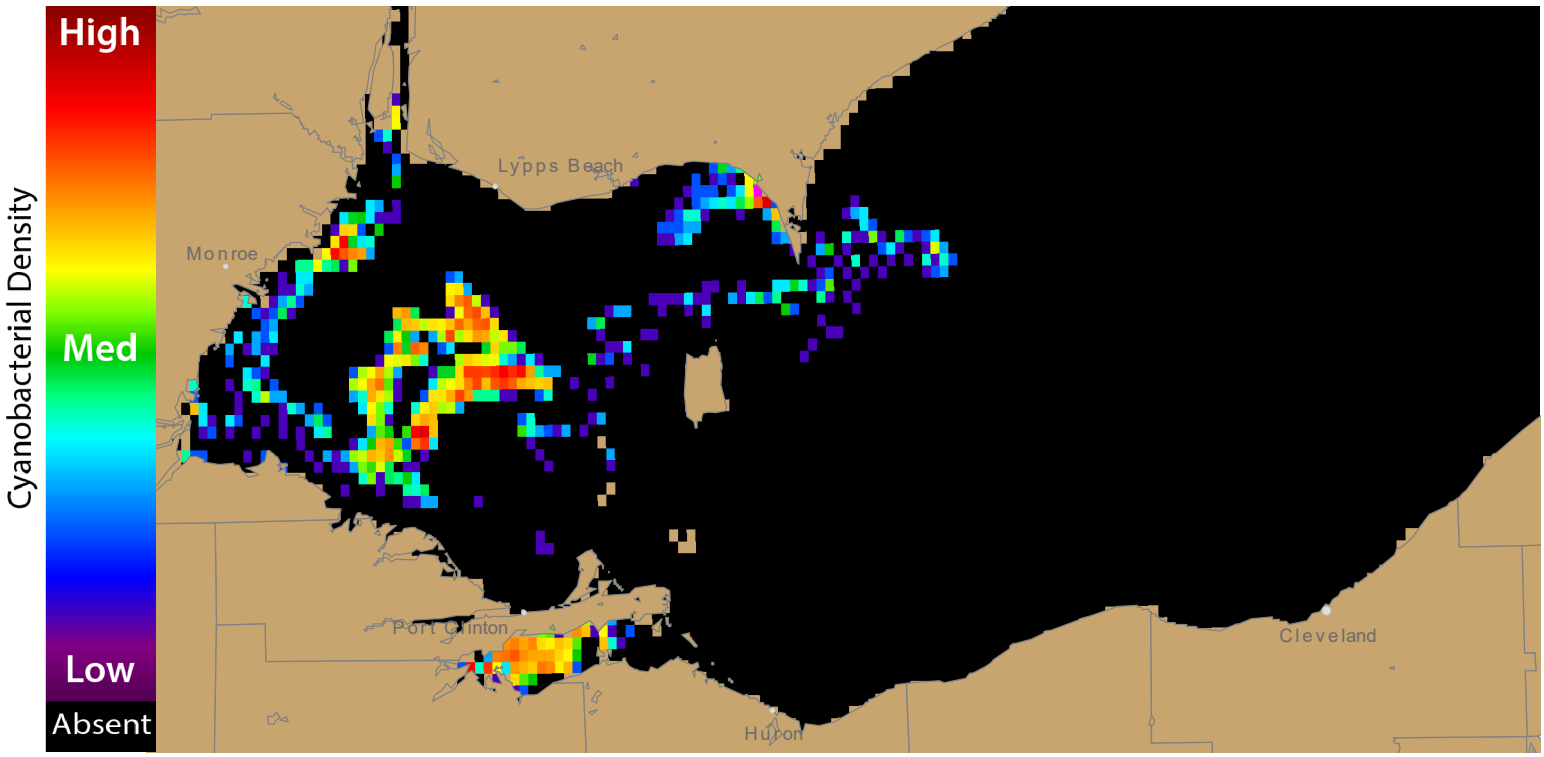
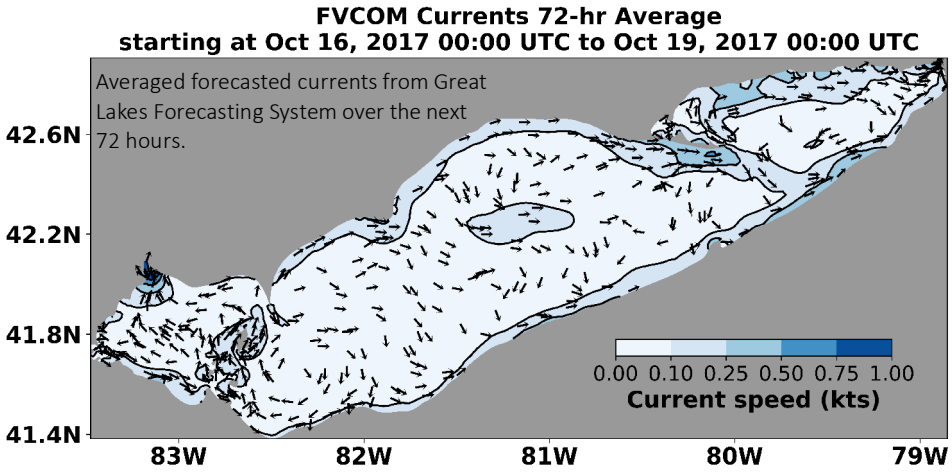


Figure 4. Forecast position of bloom for 19 October, 2017 using GLFS modelled currents to move the bloom from the 13 October, 2017



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