



# Lake Erie Harmful Algal Bloom Bulletin

27 October, 2017, Bulletin 31

The *Microcystis* cyanobacteria bloom has decreased in concentration from previous levels. Localized patches remain visible in the western basin along the Michigan and Ohio coasts. Measured toxin concentrations are below recreational thresholds throughout the bloom extent.

Forecast winds (10-30kn) today through Monday (10/27-30) will likely promote mixing and easterly transport of remaining *Microcystis*. Water temperatures have declined below 59°F (15°C) in the western basin which should continue to substantially decrease bloom concentrations through Monday.

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](https://www.glerl.noaa.gov/res/HABs_and_Hypoxia). The persistent cyanobacteria bloom in Sandusky Bay continues. No other blooms are evident in the central or eastern basins.

—Kavanaugh, Urizar

The images below are "GeoPDF". Please visit <https://go.usa.gov/xReTC> for instructions on viewing longitude and latitude.

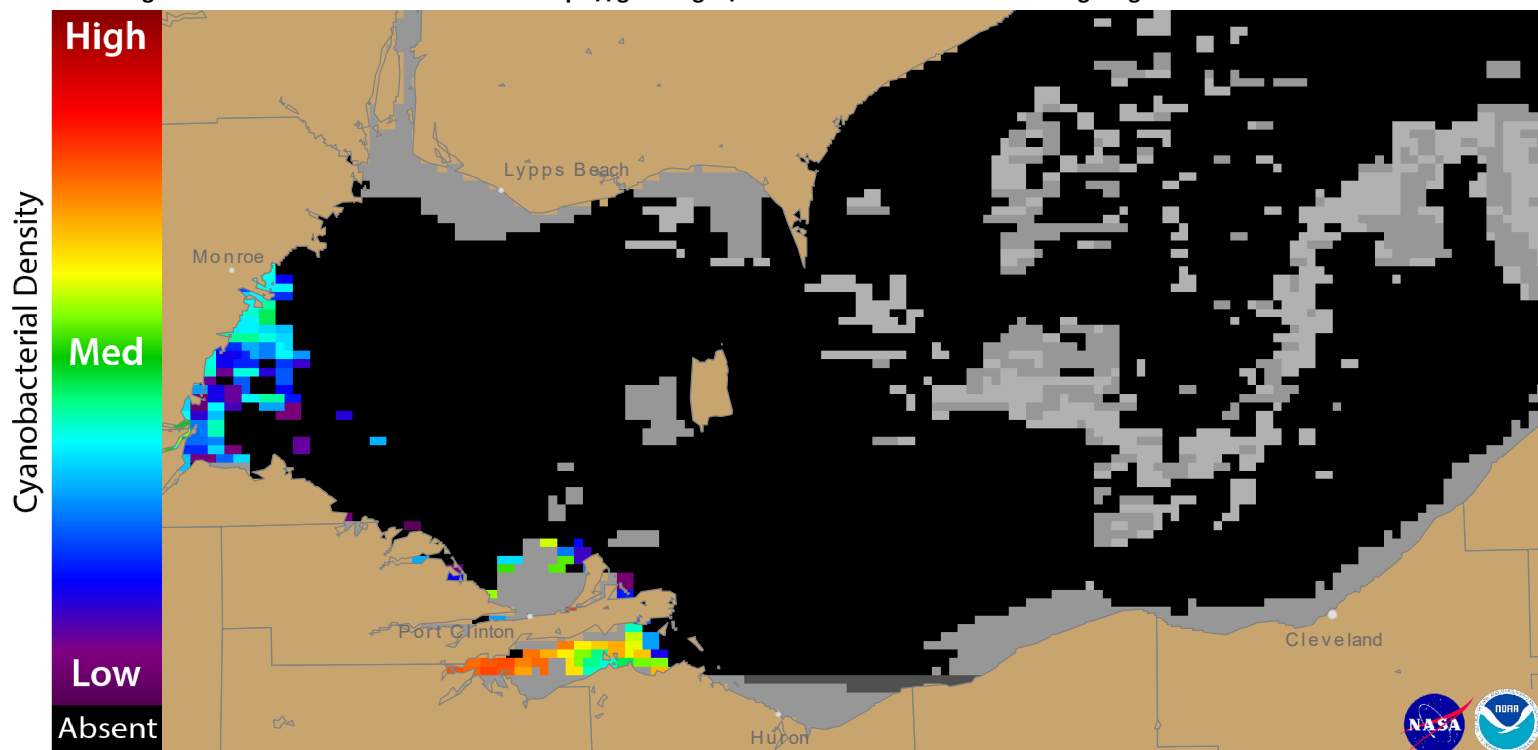


Figure 1. Cyanobacterial Index from NASA MODIS-Terra data collected 26 October, 2017 at 11:55 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

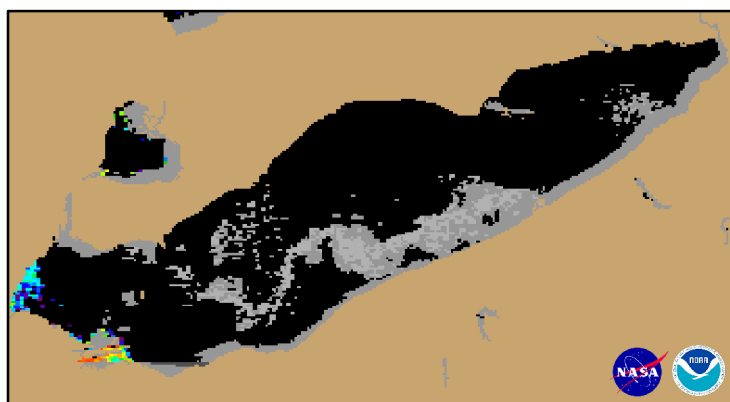
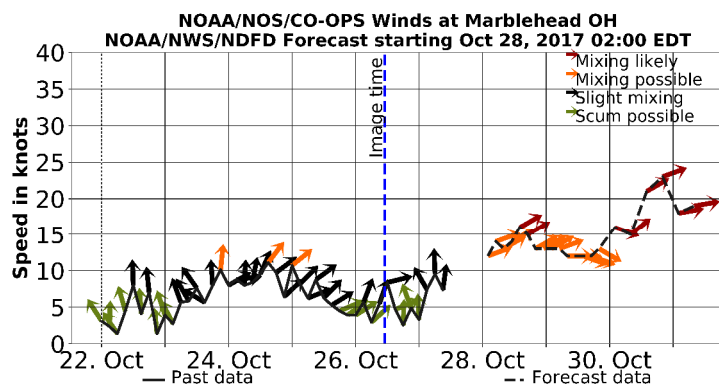


Figure 2. Cyanobacterial Index from NASA MODIS-Terra data collected 26 October, 2017 at 11:55.



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).

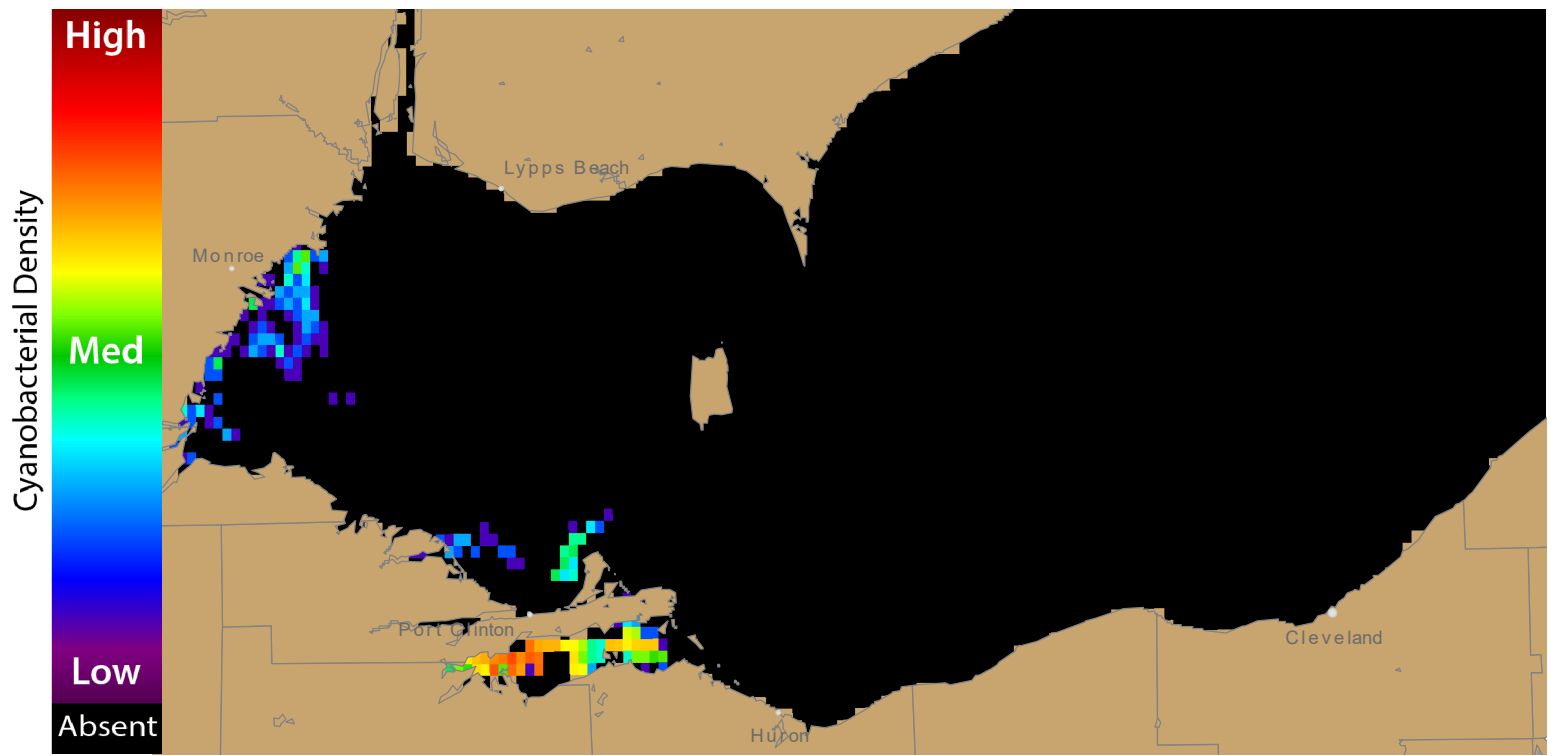


Figure 3. Nowcast position of bloom for 27 October, 2017 using GLFS modelled currents to move the bloom from the 26 October, 2017

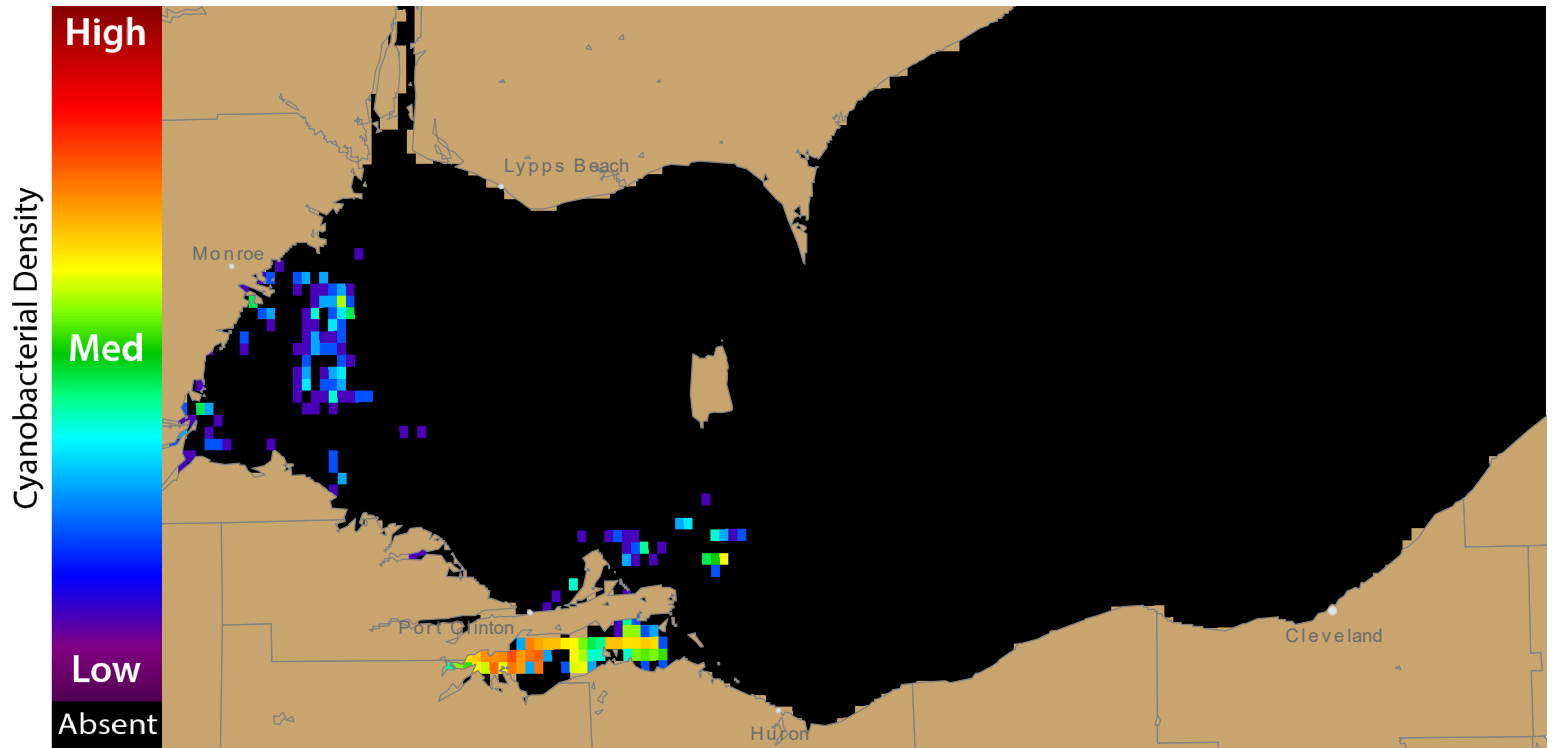
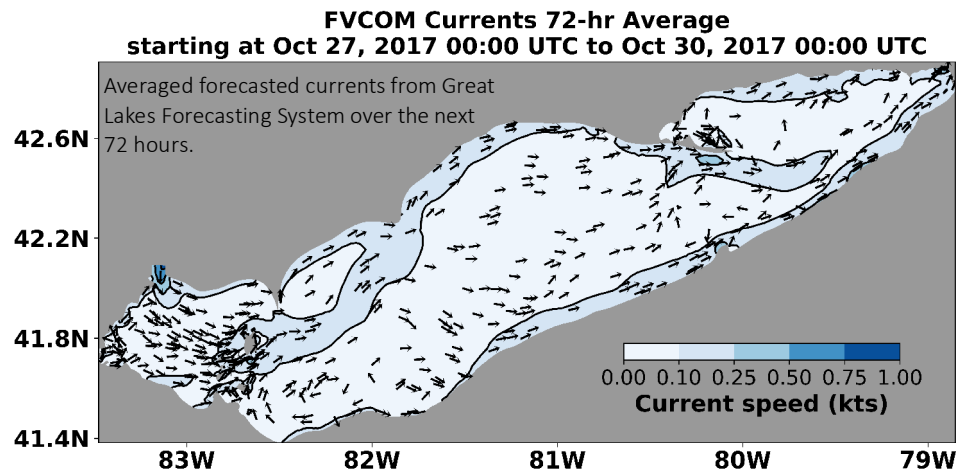


Figure 4. Forecast position of bloom for 30 October, 2017 using GLFS modelled currents to move the bloom from the 26 October, 2017



For more information and to subscribe, please visit the NOAA HAB Forecast page:  
<https://tidesandcurrents.noaa.gov/hab/lakeerie.html>