



Lake Erie Harmful Algal Bloom Bulletin

27 September, 2018, Bulletin 29

Analysis

The *Microcystis* cyanobacteria bloom in the western basin of Lake Erie continues to decrease in concentration and extent. Observed winds yesterday (9/26) caused mixing that reduced surface concentrations. The *Microcystis* bloom is below detectable limits in satellite imagery throughout most of the western basin, although very low concentrations can be seen in Maumee Bay. Scum has not been found in the bloom region. Measured toxin concentrations have decreased since last week and remain below the recreational threshold at all locations. *Keep pets and yourself out of the water in areas where scum is forming.* The persistent cyanobacteria bloom in Sandusky Bay continues.

Forecasts

Forecast winds (3-18 kn) tomorrow through Sunday (9/28-30) may cause mixing and eastward transport of remaining *Microcystis* concentrations. Water temperatures are approaching 68°F (20°C), limiting the growth of *Microcystis* concentrations in the western basin. -Davis, Lalime

Additional Resources

To find a safe place for recreation, visit the Ohio DOH "BeachGuard" site: <http://publicapps.odh.ohio.gov/beachguardpublic/>
Ohio EPA's site on harmful algal blooms: <http://epa.ohio.gov/HAB-Algae>
NOAA's GLERL provides additional HAB data here: http://www.glerl.noaa.gov/res/HABs_and_Hypoxia

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

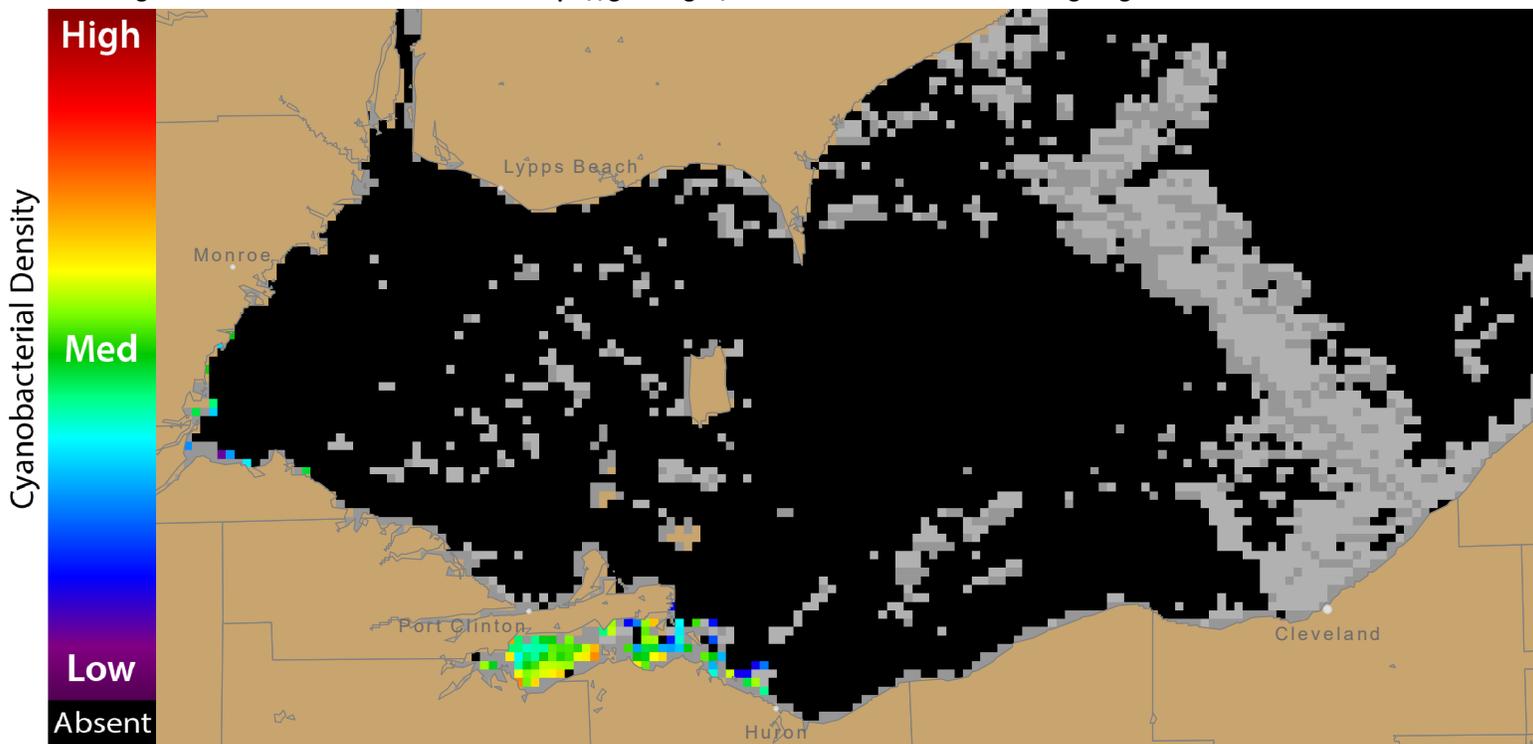


Figure 1. Cyanobacterial Index from NASA MODIS-Aqua data collected 26 September, 2018 at 12:56 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

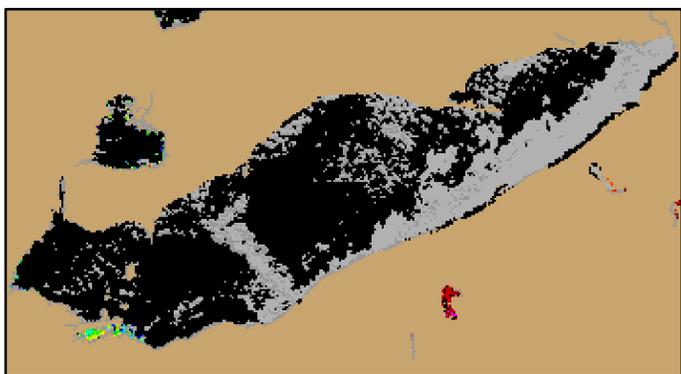
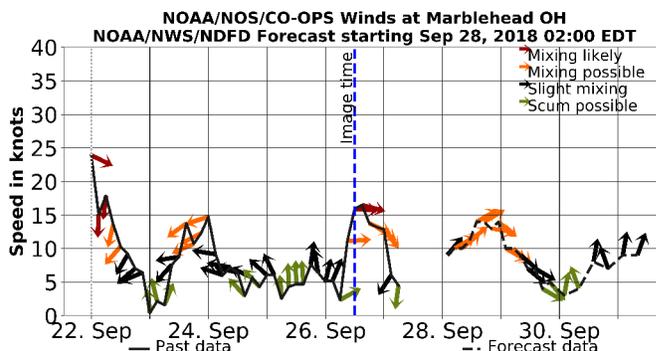


Figure 2. Cyanobacterial Index from NASA MODIS-Aqua data collected 26 September, 2018 at 12:56.



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).

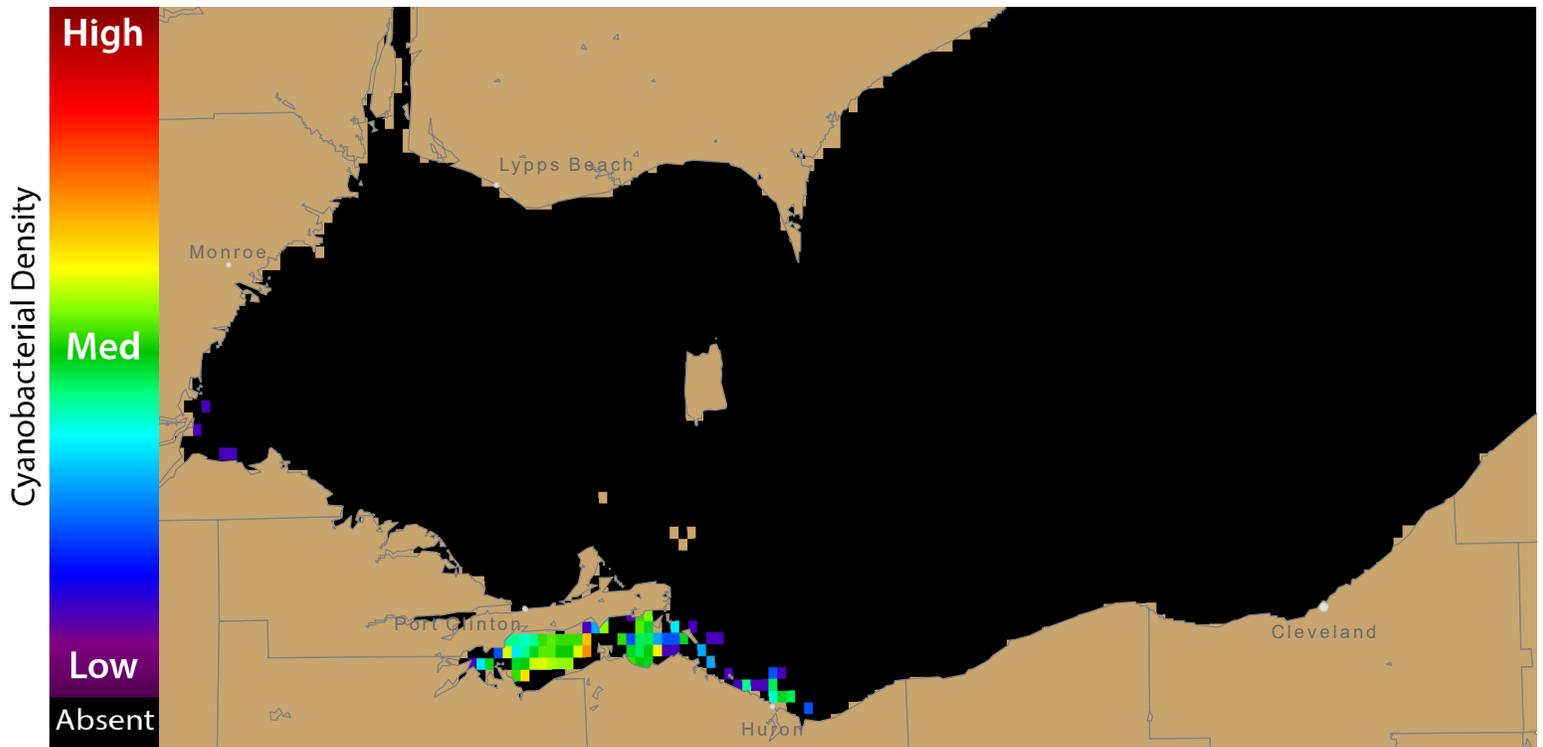


Figure 3. Nowcast position of bloom for 27 September, 2018 using LEOFS modelled currents to move the bloom from the 26 September,

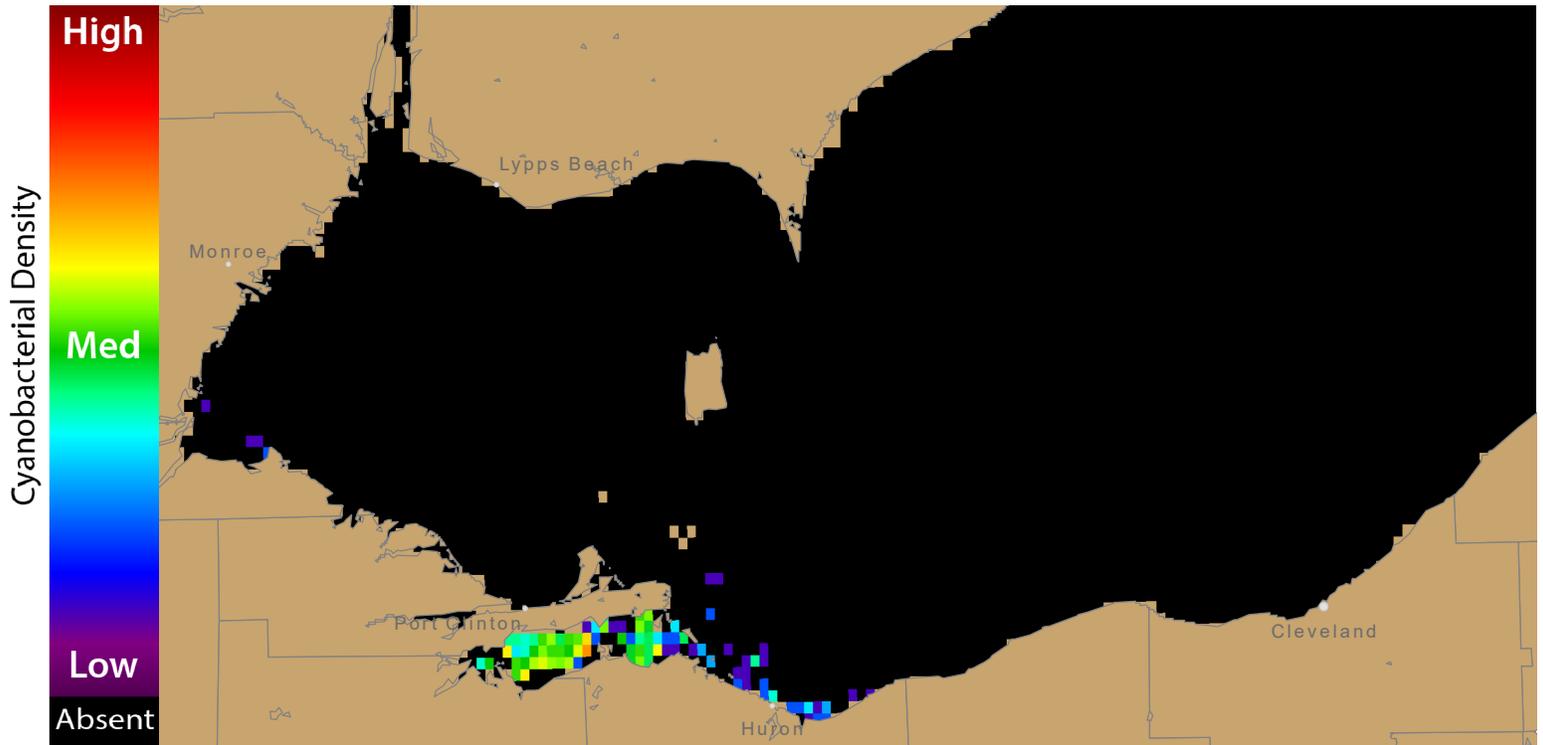
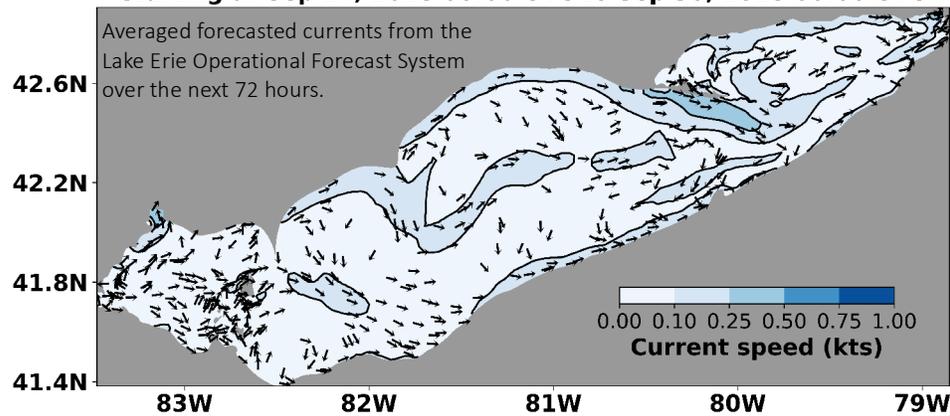


Figure 4. Forecast position of bloom for 30 September, 2018 using LEOFS modelled currents to move the bloom from the 26 September, 2018 image.

**FVCOM Currents 72-hr Average
starting at Sep 27, 2018 00:00 UTC to Sep 30, 2018 00:00 UTC**



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