



Lake Erie Harmful Algal Bloom Bulletin

13 September, 2018, Bulletin 25

Analysis

The *Microcystis* cyanobacteria bloom continues in the western basin of Lake Erie. Recent satellite imagery (9/11) shows the bloom extending from the Maumee Bay east along the coast of Ohio to the Portage River. A large sediment plume throughout the western basin may be obscuring detected concentrations. Winds observed over this week (9/10-13) likely promoted mixing of *Microcystis* concentrations. Toxin concentrations were detected at most sampling sites and remain below the recreational threshold. *Keep pets and yourself out of the water in areas where scum is forming.* The persistent cyanobacteria bloom in Sandusky Bay continues.

Forecasts

Winds (3-7 kn) forecast today through Saturday (9/13-15) may lead to scum formation in areas of high *Microcystis* concentrations. Winds will promote westward transport of *Microcystis* concentrations today through Monday (9/13-17). --Ludema, Davis

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.

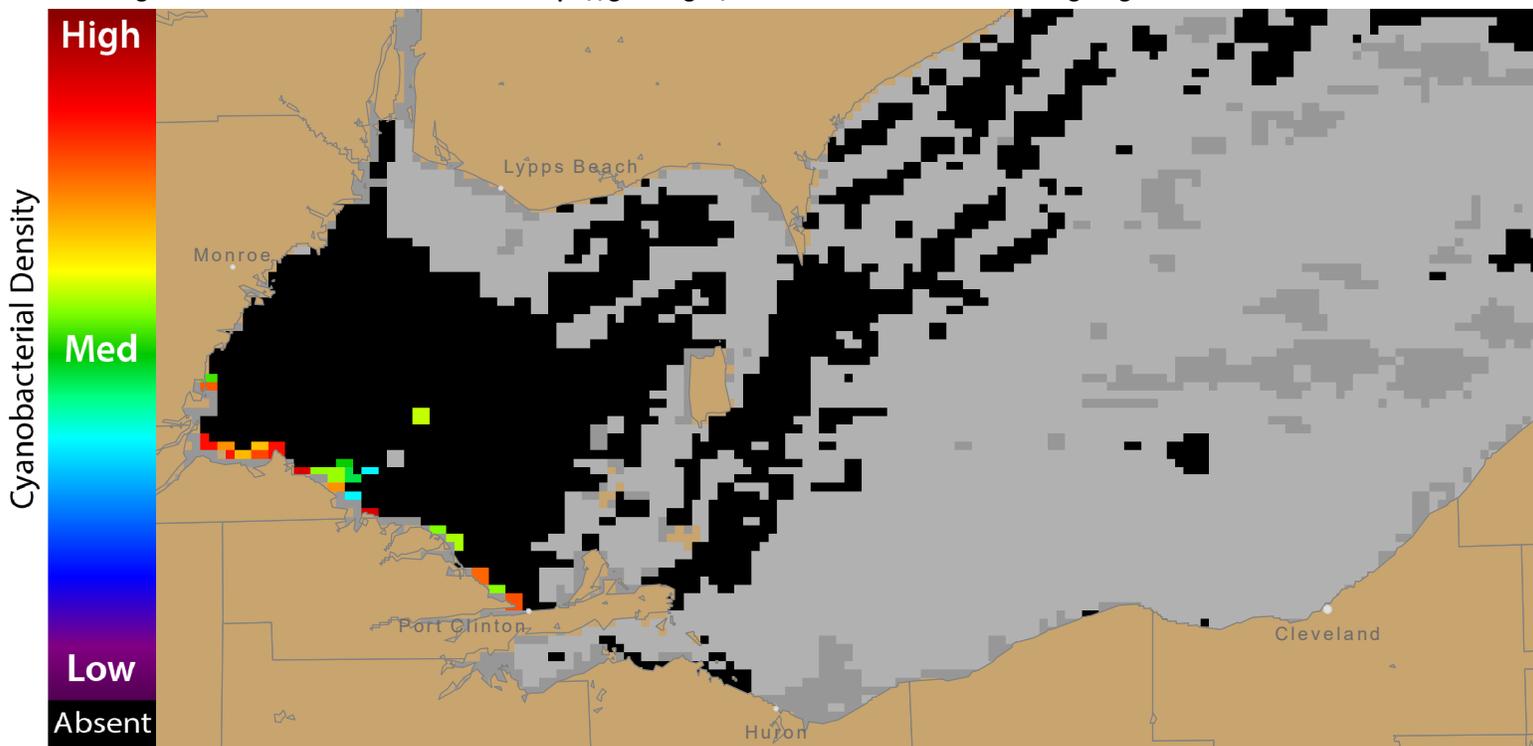


Figure 1. Cyanobacterial Index from NASA MODIS-Terra data collected 11 September, 2018 at 11:56 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

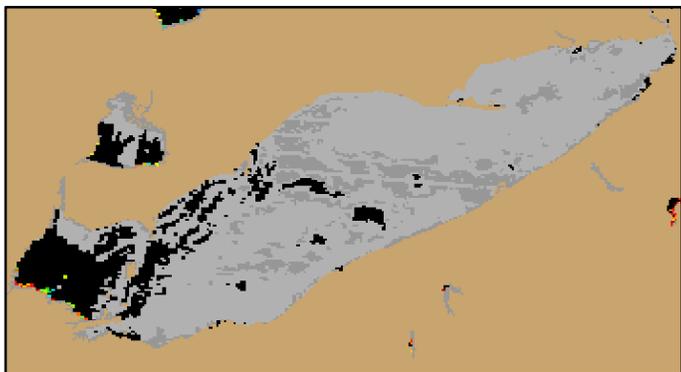
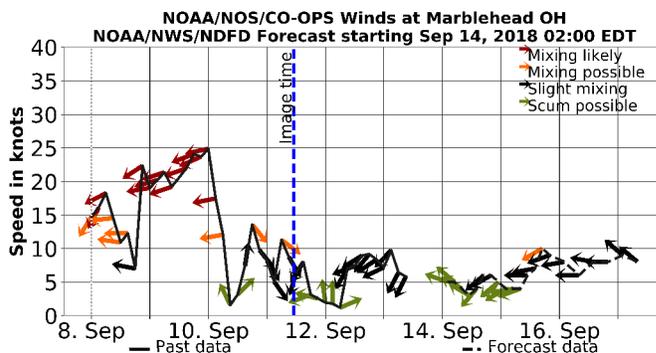


Figure 2. Cyanobacterial Index from NASA MODIS-Terra data collected 11 September, 2018 at 11:56.



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).

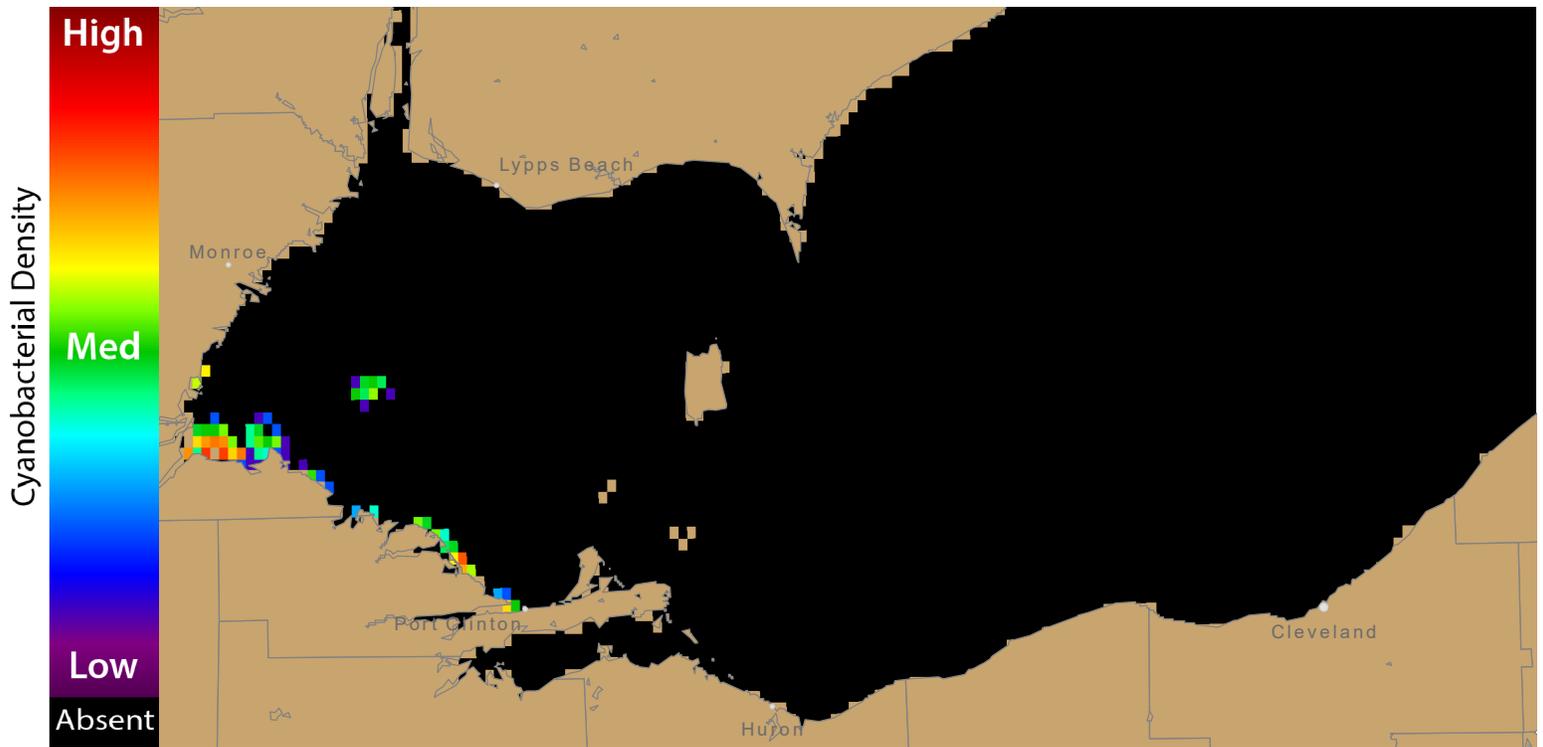


Figure 3. Nowcast position of bloom for 13 September, 2018 using LEOFS modelled currents to move the bloom from the 11 September,

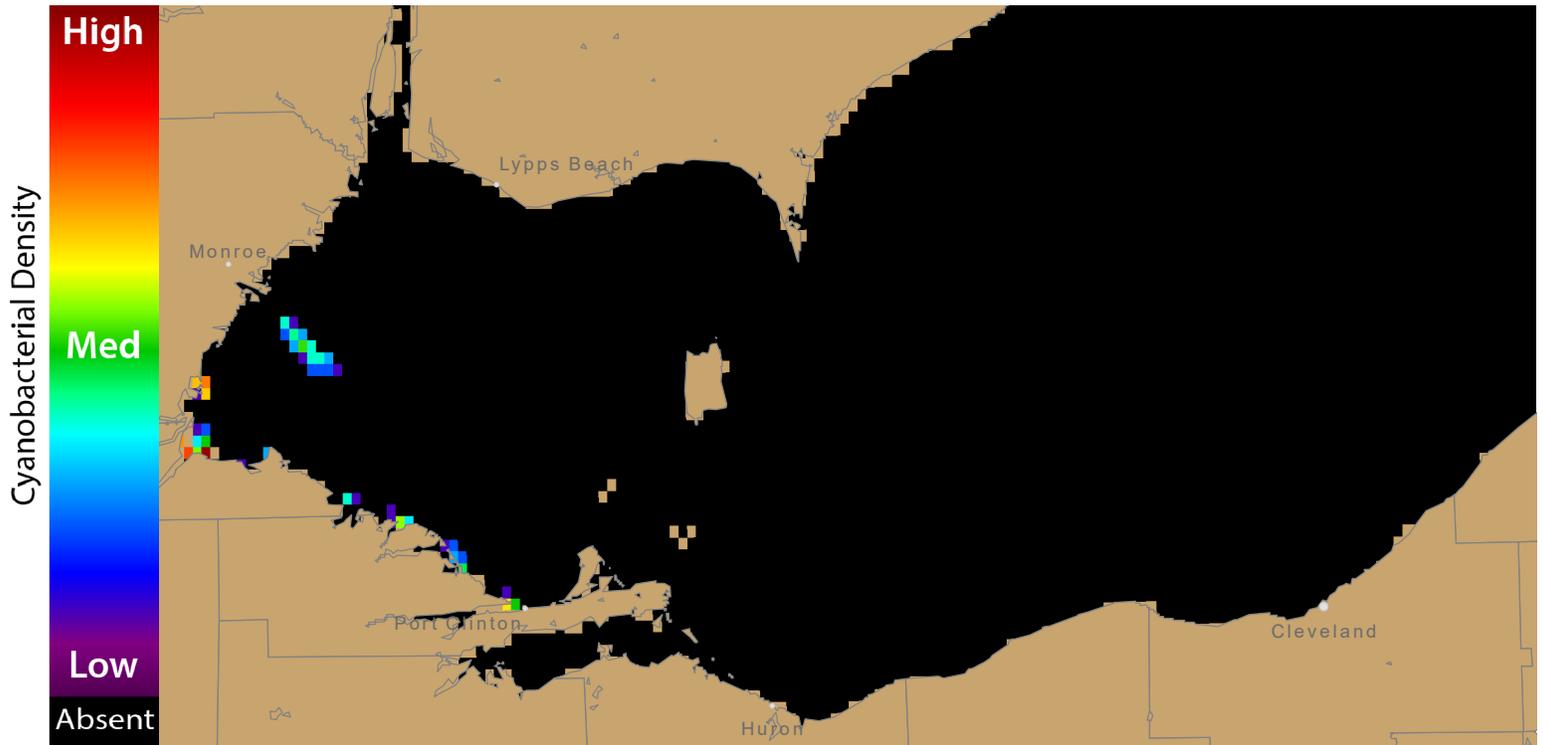
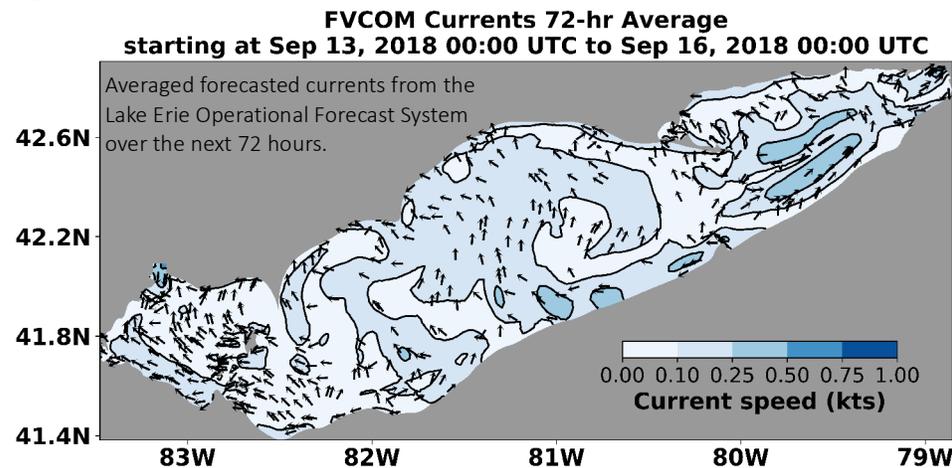


Figure 4. Forecast position of bloom for 16 September, 2018 using LEOFS modelled currents to move the bloom from the 11 September,



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