

Experimental Lake Erie Harmful Algal Bloom Bulletin

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Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from August 09, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from shown as white squares (very high), circles (high), diamonds (medium), triangles (low), + (very low) and X (not present).



Figure 2. Nowcast position of *Microcystis* spp. bloom for August 12 using GLCFS modeled currents to move the bloom from the August 09 image.

Conditions: A bloom of the cyanobacteria, Microcystis, has been identified in the areas of Maumee Bay and Catawba Island.

Analysis: Imagery and field observations from earlier this week indicate high concentrations of Microcystis in Maumee Bay and in the area of Catawba Island and South Bass Island. Field observations showed the highest densities of Microcystis just east of Catawba Island and in Put-in-Bay. Models indicate slight offshore and eastward transport over the next three days. Winds are forecasted to increase slightly but remain relatively low over the weekend. -Lopez, Briggs



Figure 3. Forecast position of *Microcystis* spp. for August 15 using GLCFS modeled currents to move the bloom from August 09 image.

Please note:

⁻ MERIS imagery was distributed by the NOAA CoastWatch Program and provided by the European Space Agency

 $^{-\} http://www.glerl.noaa.gov/res/Centers/HABS/lake_erie_hab/lake_erie_hab.html$

⁻ Cell counts were collected by the Great Lakes Environmental Research Laboratory

⁻ The wind data is available through the National Data Buoy Center and the National Weather Service

⁻ Modeled currents were provided through the Great Lakes Coastal Forecasting System

