



Experimental Lake Erie Harmful Algal Bloom Bulletin

2011-013

01 September 2011

National Ocean Service

Great Lakes Environmental Research Laboratory

Last bulletin: 25 August 2011

Conditions: A confirmed *Microcystis* bloom persists in Western Lake Erie.

Analysis: The large *Microcystis* bloom continues in Western Lake Erie. Imagery is from August 28 and due to a large cloud present the models do not show the potential full extent of the bloom. Wind conditions and high temperatures are conducive for bloom intensification.

-Neff, Briggs

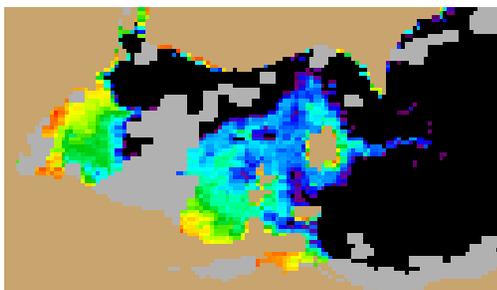


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from August 28, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from shown as white squares (very high), circles (high), diamonds (medium), triangles (low), + (very low) and X (not present). Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

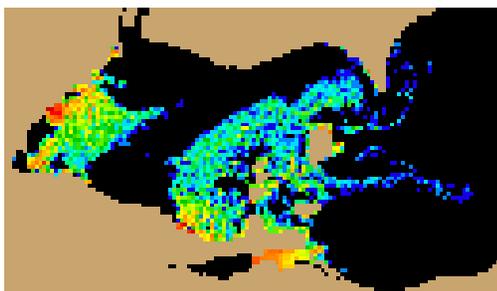


Figure 2. Nowcast position of *Microcystis* spp. bloom for September 01 using GLCFS modeled currents to move the bloom from the August 28 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

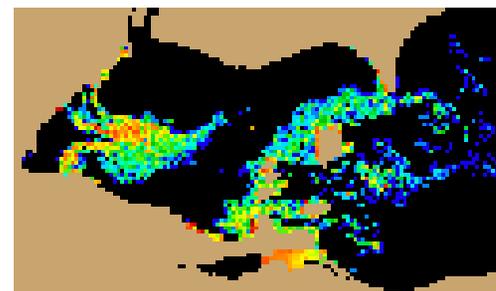


Figure 3. Forecast position of *Microcystis* spp. for September 04 using GLCFS modeled currents to move the bloom from August 28 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

Please note:

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

