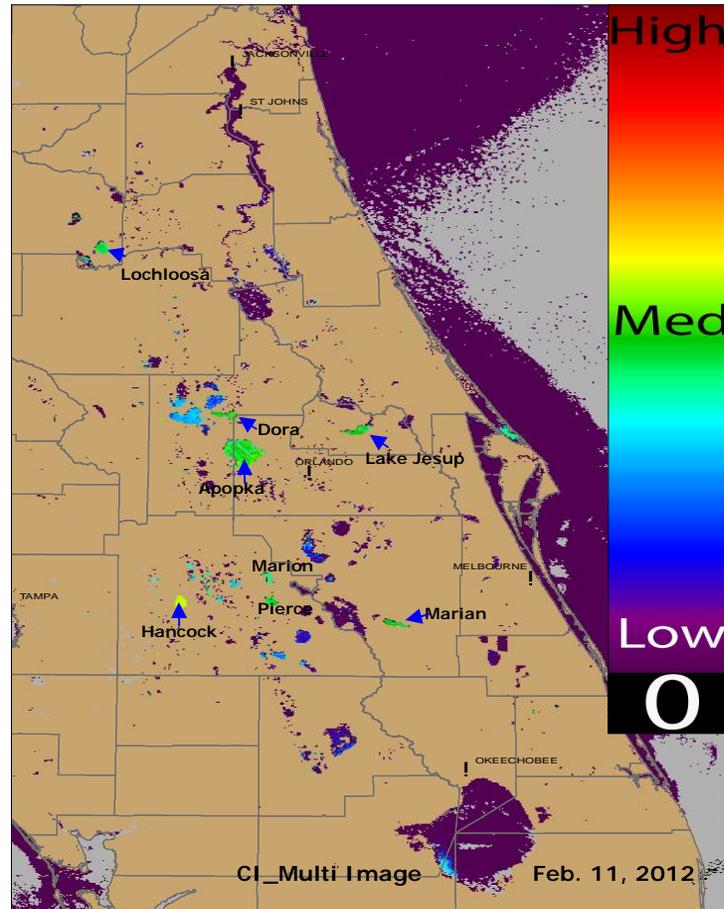


To report an illness related to a marine toxin or algal bloom please contact the Florida Poison Information Center-Miami Aquatic Toxins Hotline at 1-888-232-8635. For questions about the report: please contact Becky Lazensky, FL-DOH, at 352-955-1900. Images/data were obtained from Florida Water Management Districts, The National Oceanic and Atmospheric Administration (NOAA), NOAA National Climatic Data Centers and National Weather Centers. Support to produce this report was received through a NOAA/NASA Agreement (Number: NNH08ZDA001N)

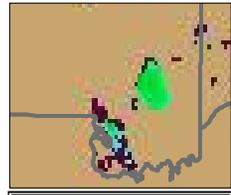


If your agency has field sampling data on the regions shown in red, these data can be used to help validate the MERIS imagery. Contact Becky Lazensky at: 352-955-1900 to participate in future FDOH validation efforts.

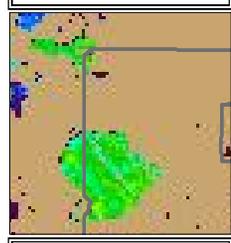
CyanoHabs Conditions Report: Feb. 11

- The software used to analyze the MERIS images was not fully operational this week. As a result, the imagery may have missed some of the cyanobacteria activity that would typically be detected
- Lochloosa and Orange Lakes (Alachua and Marion Counties) displayed medium estimated cyanobacteria concentrations
- Lake Apopka and Dora (Orange and Lake Counties) displayed medium estimated cyanobacteria concentrations
- Lake Okeechobee (Glades, Okeechobee, Martin, Palm Beach, and Hendry Counties) had low cyanobacteria concentrations

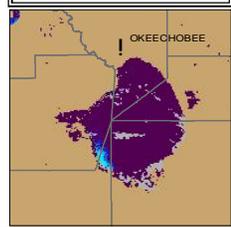
Lochloosa and Orange Lakes



Apopka and Dora Lakes



Lake Okeechobee



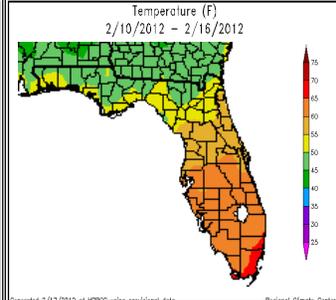
Survey Results

By: Becky Lazensky, MPH

On January 12, 2012 an electronic survey was emailed to the 92 subscribers who receive the satellite health bulletins. In total, 48 (52%) respondents completed the survey.

The two most common uses of the bulletins were providing information on public health threats and getting spatial information on the location of existing algal blooms.

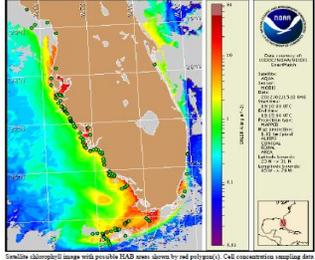
Thank you for taking the time to submit this survey. We plan to use the feedback received to make continued improvements to the bulletins.



The MERIS Satellite Images above display a cyanobacteria index generated with a Medium Resolution Imaging Spectrometer (MERIS) satellite provided by the European Space Agency & NOAA.

- Very low likelihood of a bloom
- May indicate clouds or missing data
- Low cyanobacteria concentrations
- Medium cyanobacteria concentrations
- Probable bloom or higher cyanobacteria concentrations

Non CyanoHABS & Health Report-K. brevis Update: Feb. 17, 2012



Gulf of Mexico Harmful Algal Bloom Bulletin Region: SW Florida
Date: February 16, 2012
NOAA Ocean Service, NOAA Satellite and Information Service, NOAA National Weather Service

Confirmed Species: *Karenia brevis*

FWRI /FWC Results: *K. brevis* was not detected in water samples collected this week alongshore of Pinellas, Hillsborough, Manatee, Sarasota, Charlotte and Collier counties or alongshore and offshore of northern Monroe County. One sample collected alongshore of Lee County contained background concentrations of *K. brevis*.

Health Reports: None

To Report a Fish Kill: Call the FWRI/FWC Fish Kill Hotline: 1-800-636-0511

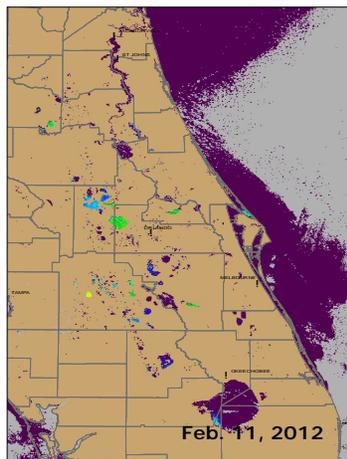
Visit FWRI /FWC for Updates:

<http://myfwc.com/research/redtide/events/status/>

Interpreting Medium Resolution Imaging Spectrometer Satellite Imagery



- The medium resolution imaging spectrometer (MERIS) is located on the Envisat satellite deployed by the European Space Agency.
- The cyanobacterial index algorithm shown in this report is designed to identify high biomass algal blooms caused by cyanobacteria. However, the current algorithm tends to have false positives, so other blooms may be "flagged". NOAA is currently testing new algorithms that are more specific to cyanobacteria.
- Data can be used to estimate near surface cyanobacteria concentrations which are an indication that algal blooms may be present.
- The mathematical algorithms used to generate the satellite images can vary, resulting in some models having a higher likelihood of detecting surface blooms.
- While patches of red or warm colors may indicate a bloom, these data have not been verified in most cases using ground-truth methods. Data collected by the satellite is considered experimental.
- Only portions of Florida are in the satellite's current coverage area.



- Several environmental factors may affect how results can be interpreted. For example, areas with abundant aquatic plant vegetation may present with a high cyanobacteria index on the color spectrum, resulting in a false positive bloom reading.
- The satellite identifies the biomass near the surface (in the upper few feet of water). As a result, it may underestimate the total biomass for blooms that are mixed or dispersed through the water column. Turbidity does not otherwise influence the algorithms. The satellite imagery does not display the species of algae present.
- Cloud coverage can obscure imagery and create patches or gray areas on map and obscure bloom detection.
- Weather conditions can impact the duration and location of blooms and the satellite imagery shown in this report may no longer be relevant. Images represent the last image taken with a realization that blooms may have moved, dissipated or intensified.

To review HABs satellite reports in the Gulf of Mexico and marine waters visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>



For Individual Weather Station Data Visit:
http://www.sercc.com/climateinfo/historical/historical_fl.html

Questions about the report or suggestions: You can contact Becky Lazensky, MPH
352-955-1900
Becky_Lazensky@doh.state.fl.us