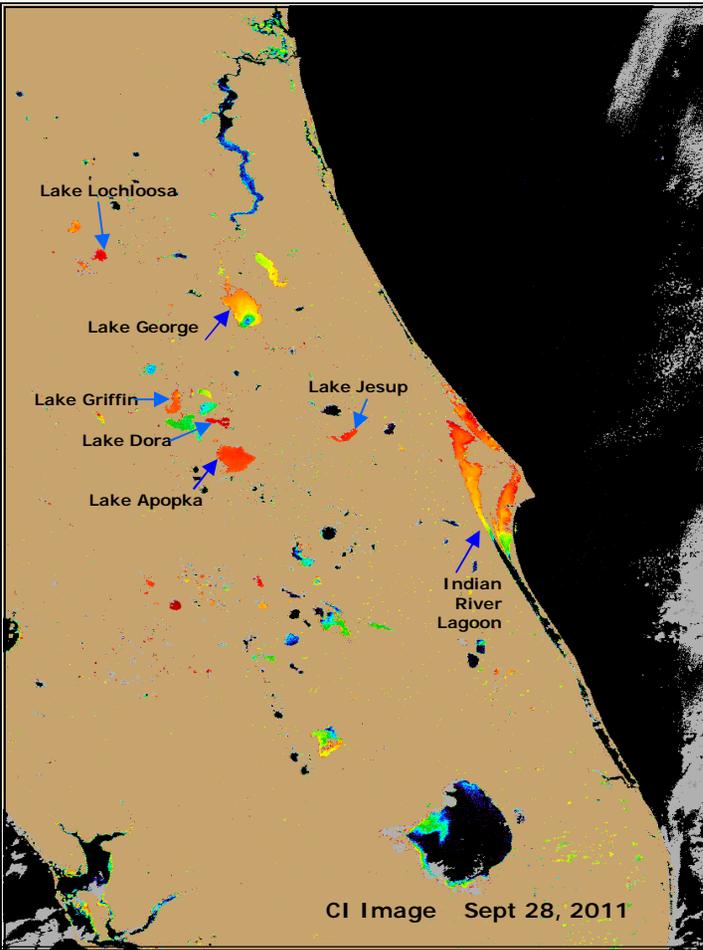


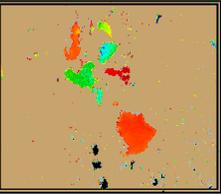
To report an illness related to a marine toxin or algal bloom please contact the Florida Poison Information Center-Miami Aquatic Toxins Hotline at 1-888-232-8635. For questions about the report: please contact Becky Lazensky, FL-DOH, at 352-955-1900. Images/data were obtained from Florida Water Management 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)



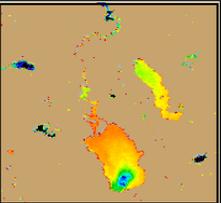
CyanoHabs Conditions Report: Sept 28

- Cyanobacteria estimates were elevated in several central Florida lakes including Lake Apopka, Griffin, and Dora.
- Alachua and Lake counties had several lakes w/ high estimates.
- Cyanobacteria estimates were elevated from Palatka to Lake George.
- Lochloosa, Newnans, and Orange Lake each had a medium to high cyanobacteria estimate in the MERIS imagery.

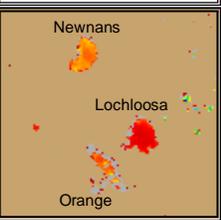
Lakes Apopka, Griffin, and Dora



Lake George

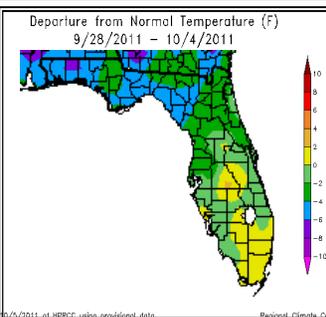
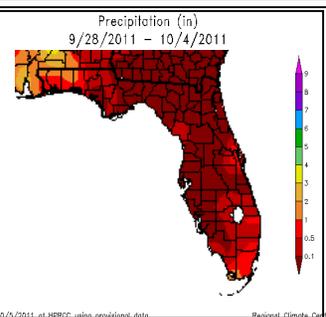
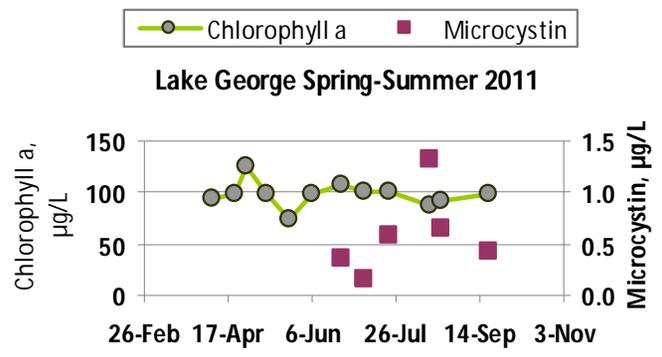


Lochloosa, Newnans and Orange Lake



St Johns River Water Management District Conditions Report: John Hendrickson and Robert Burks

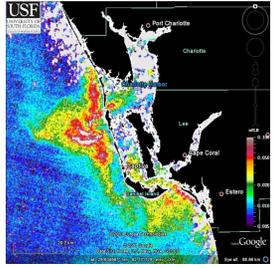
See summary below of this summer's microcystin and chlorophyll a concentrations in the St Johns. For more information on the St Johns River email John Hendrickson at: JHendrickson@sjrwmd.com



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 and Health Report: *Karenia Brevis* Bloom Continues-Update Oct 6:



MERIS image taken from USF Optical Oceanography Laboratory
College of Marine Science:
<http://optics.marine.usf.edu/cgi-bin/optics>

Located: Charlotte and Lee counties.
Update: In the last week, the bloom moved south. It was located outside of Charlotte Harbor on 10/6.
Sampled By: Florida Fish and Wildlife Conservation Commission (FWC); First Detected on 9/26 at Manasota Beach by Mote Marine Laboratory
Confirmed Species: *Karenia brevis*
Concentration Range: Low to high concentrations
Fish Kill: On 9/28, a fish kill was reported in the Venice Inlet.
Health Effects: No illnesses were reported; surveillance is ongoing.
To Report a Fish Kill: Please call FWC's Fish Kill Hotline at 1-800-636-0511.
Visit FWC for Updates: <http://myfwc.com/research/redtide/events/status/>

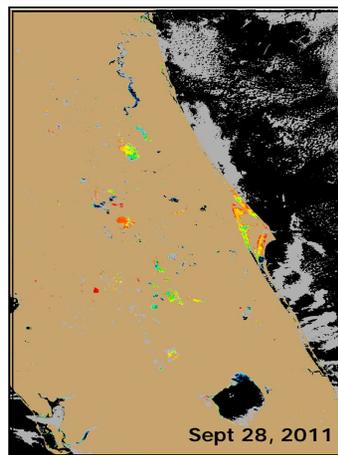
For more information on current beach conditions visit: <http://coolgate.mote.org/>



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