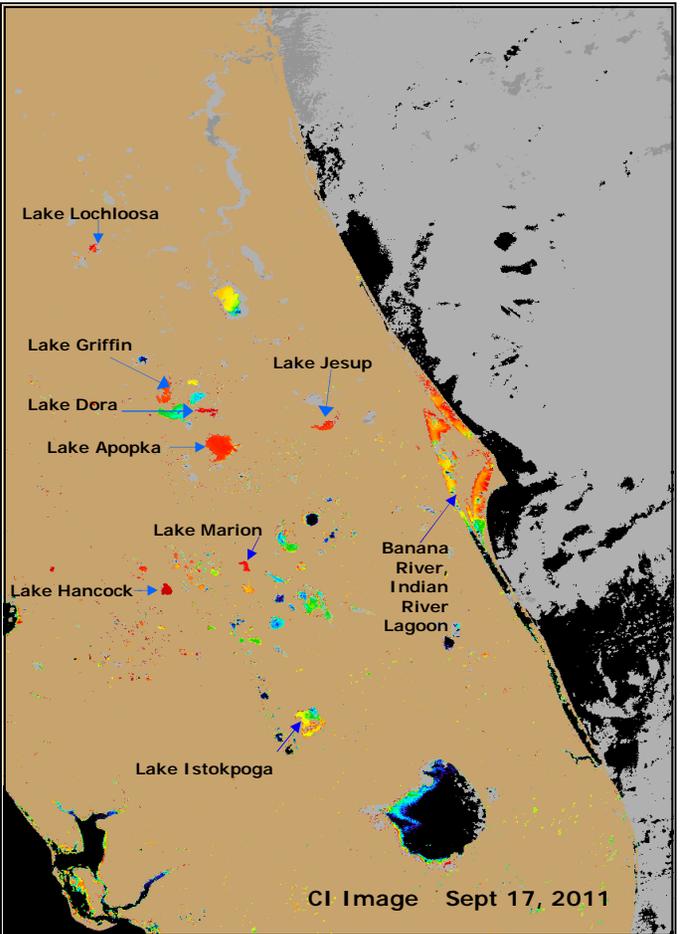
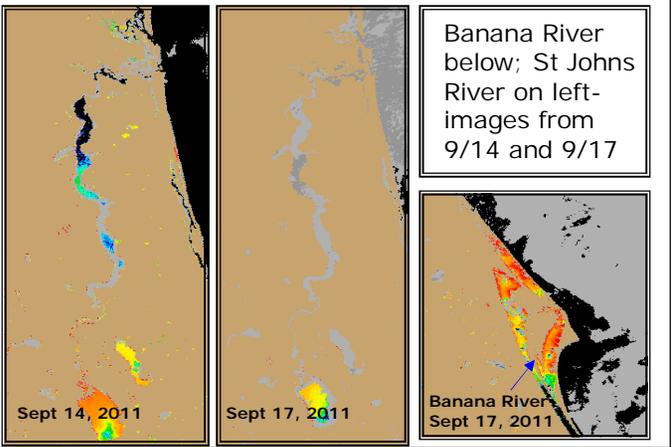


To report an illness related to a marine toxin or algal bloom please contact the Florida Poison Information Center-Miami Aquatic Toxins Hotline at 1-888-232-8635. For questions about the report: please contact Becky Lazensky, FL-DOH, at 352-955-1900. Images/data were obtained from Florida Water Management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



Conditions Report: Sept 17, 2011

- Cyanobacteria estimates were elevated in Lake Lochloosa, Griffin, Dora, Jesup, Apopka, Marion, Hancock, and the Indian River Lagoon.
- A small fish kill and algal bloom was reported in the St Johns River on 9/16 near Picolata. See HABs and Health section on right for more details.
- Several large fish kills were reported to FWC in the Banana River on 9/19-see image of the Banana River below on right.
- The satellite images below show the St Johns River on 9/14 and 9/17 for comparison.



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.

St Johns River

Location: St Johns River
Appearance: white foam w/ green algal mats on the surface. Numerous dead moths mixed in with the foam. No odor reported.
First observed: 9/16 at 9am.
Update: As of 9/19, the bloom has dissipated. The bloom reporter mentioned it rained which may have helped dissipate the bloom.
Fish Kill: small scale: 5-6 fish



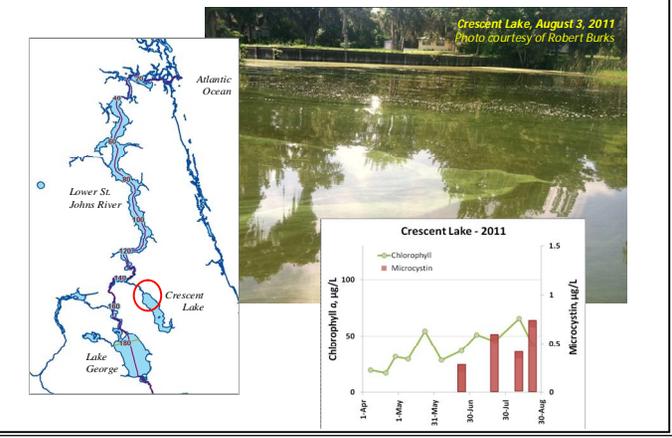
Foam in St Johns River
Photo credits: Private Citizen

To report a fish kill, call the Fish and Wildlife Research Institute's hotline at 1-800-636-0511



St Johns River Water Management District Conditions Report: By John Hendrickson

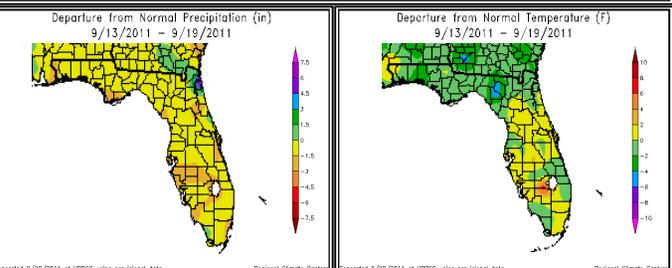
The photo below of Crescent Lake displays a suspect microcystis bloom which corresponds to increased cyanobacteria concentrations during the month of August. For more information email John Hendrickson at: JHendrickson@sjrwmd.com



HABs and Health: Illness reports in boaters in the St Johns River, Picolata FL:

A cluster of 4 illnesses in a single family with a home next to the St Johns River was reported to the FWC Fish-Kill hotline and interviewed by DOH. Their exposure route was inhalation while boating.

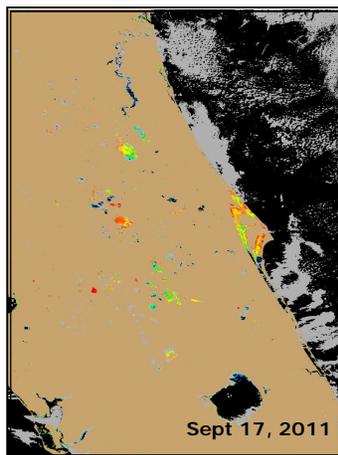
The family started feeling ill on 9/14 with initial respiratory symptoms which later progressed to GI symptoms. Reported: cold/flu-like symptoms, desire to cough/clear throat, aches in chest/lungs, and diarrhea in 2 persons. Symptoms have now resolved. See summary on left for bloom description. *This illness cluster may or may not have been caused by a HAB event.*



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