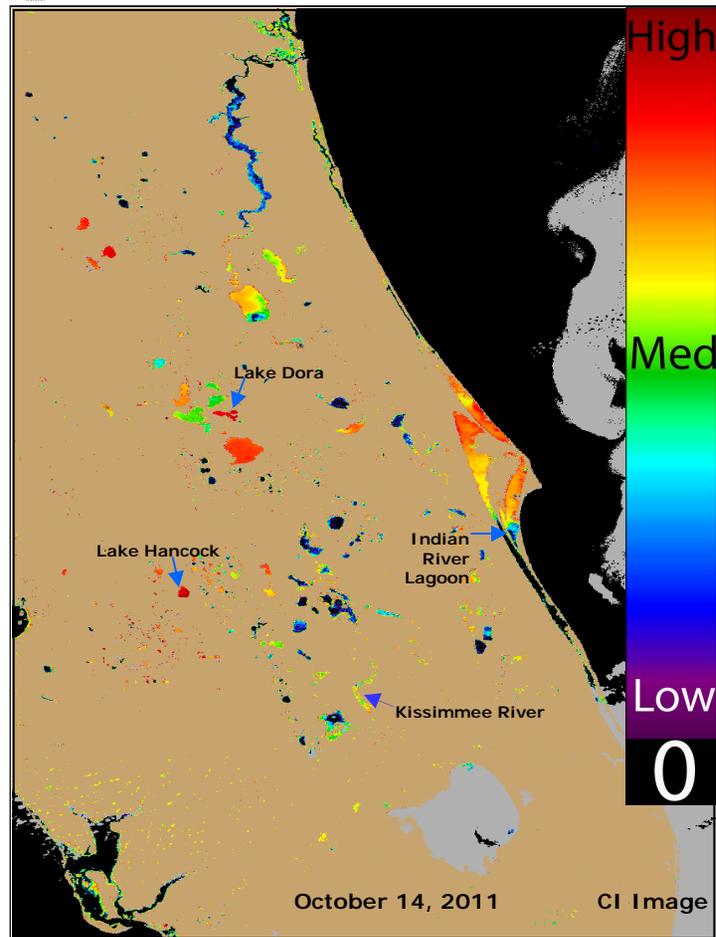
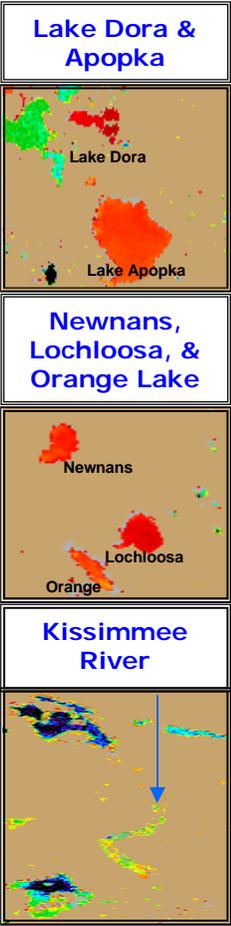


To report an illness related to a marine toxin or algal bloom please contact the Florida Poison Information Center-Miami Aquatic Toxins Hotline at 1-888-232-8635. For questions about the report: please contact Becky Lazensky, FL-DOH, at 352-955-1900. Images/data were obtained from Florida Water Management 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: Oct 14

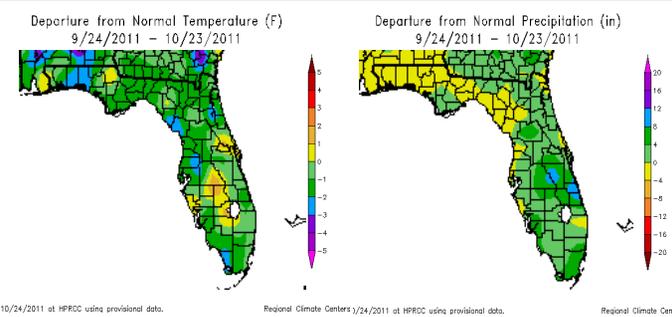
- Cyanobacteria estimates were high in Lake Apopka and Lake Dora (Lake County).
- Lakes in Alachua County continued to display high estimates including Newnans, Lochloosa, and Orange.
- The Kissimmee River showed medium est. concentrations, a finding which was not observed in the MERIS imagery previously reviewed this season.
- Lake Hancock (Polk County) displayed high est. concentrations for most of this season & remains in the high range.



Aquatic Toxins Disease Prevention Program Updates: HAB Rashes at FL Springs

An analysis of 62 HAB rash illnesses from 2007 to Oct. 2011 in visitors to FL Springs was recently completed. The table below displays the springs where incidents were reported. More results from this analysis will be displayed in future bulletins.

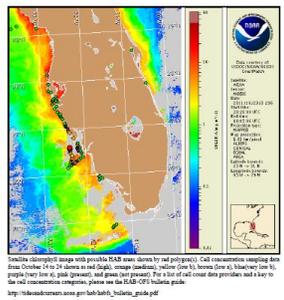
Water Body	Frequency	Percent
Ichetucknee Springs	22	35.5%
Fanning Springs	10	16.1%
Wakulla Springs	9	14.5%
DeLeon Springs	8	12.9%
Blue Springs	6	9.7%
Wekiwa Springs	3	4.8%
Rainbow Springs	2	3.2%
Rock Springs	1	1.6%
Unknown	1	1.6%
Total	62	100.0%



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: *Karenia Brevis* Bloom Continues-Oct 24: Update

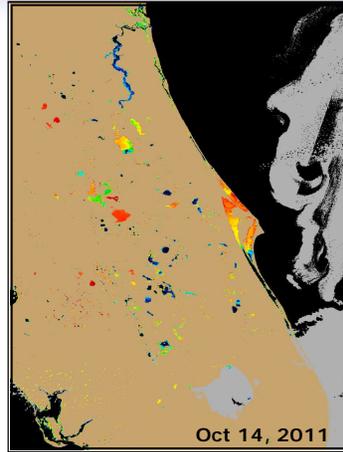


Gulf of Mexico Harmful Algal Bloom Bulletin
Region: Southwest Florida
Monday, 24 October 2011
NOAA Ocean Service
NOAA Satellite and Information

Confirmed Species: *Karenia brevis*
Located: Alongshore southern Sarasota, Charlotte, northern and central Lee counties and offshore Charlotte and Lee counties.
NOAA Gulf of Mexico Forecast: Patchy very low impacts are possible alongshore southern Sarasota and Charlotte counties Oct 24 through Oct 26. Patchy low impacts are possible alongshore northern and central Lee County through Wednesday, Oct 26.
Concentration Range: Alongshore sampling shows background to low concentrations in Sarasota, medium in Charlotte, and background to low in northern and central Lee counties (Fish and Wildlife Research Institute (FWRI/FWC), Mote Marine Laboratory, Sarasota County Health Department; 10/17-21).
Fish Kill: Multiple fish kills were reported in the affected areas.
Health Effects: No illnesses were reported; health surveillance is ongoing.
To Report a Fish Kill: Please call the FWRI/FWC Fish Kill Hotline at 1-800-636-0511.
Visit FWRI/FWC for Updates: <http://myfwc.com/research/redtide/events/status/>

Interpreting Medium

- 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.



Resolution Imaging Spectrometer



- 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
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Becky_Lazensky@doh.state.fl.us