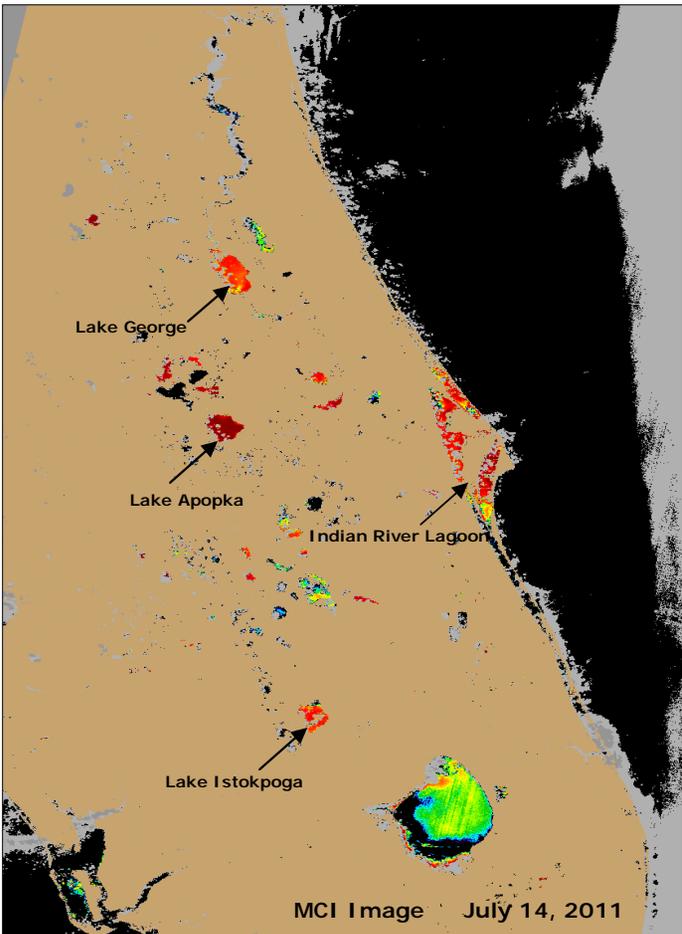


To report an illness related to a marine toxin or algal bloom please contact the FL Department of Health Aquatic Toxins Hotline at 1-888-232-8635. For questions about the report: please contact Becky Lazensky, FL-DOH, at 352-955-1900. Images/data were obtained from Florida Water Management Districts,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



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.

Conditions Report: July 14, 2011

- Cyanobacteria estimates continue to remain elevated in several lakes, including ongoing detections in Lake Apopka, Lake Istokpoga, and Lake George.
- The Indian River Lagoon continues to display an increased estimated cyanobacteria concentration.
- A recent fish kill was reported at Clam Pass and Barefoot and Vanderbilt beaches which affected nurse sharks, bonnetheads, snook, stingrays, batfish, toadfish, flounder, and baitfish.

Lake Apopka

Indian River Lagoon

Recent Blooms/ Fish Kills

Clam Pass, Vanderbilt Beach, & Barefoot Beach
Photo by: Rhonda Watkins, Collier County Pollution Control & Prevention Department

June 18, 2011

Coordinates: 26.2073,-81.8169; 26.330,-81.8453
Location: Naples, FL
Select Confirmed Species: Takayama tuberculata (dinoflagellate) and Proboscia alata (diatom)
Sampled By: Florida Fish and Wildlife and Collier County Pollution Control Department
Sample Collection Date: July 18, 2011

St Johns River Water Management District Field Brief, July 7-13, 2011

Microcystins sampling was conducted in the lower St. Johns River by the St. Johns River Water Management District. Concentrations were detected well below the recommended action thresholds for recreational use.

For a full report email John Hendrickson at: jhendrickson@sjrwmd.com

Description	Collection Date	Microcystin * Con, ppb.
Lake George North End/CM 5	7/7/11	< 0.16
St. Johns River at State Rd. 40, abv. L. George	7/7/11	0.18
SJR at Orangedale, East Shore, North of Shands Bridge	7/11/11	< 0.16
Doctor's Lake Center	7/13/11	< 0.16
St. Johns at Mandarin Point	7/13/11	< 0.16

* Microcystin analysis performed with the Enviroligix EP 022by Enzyme-Linked Immunosorbent Assay (ELISA) Kit; Minimum detection limit = 0.16 parts per billion. Analysis performed by Lake Superior State University Environmental Laboratory.

U.S. Drought Monitor July 12, 2011

Valid 7 a.m. EST

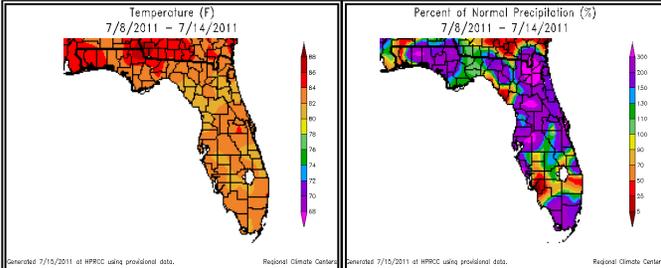
Southeast

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	21.46	78.54	59.36	41.50	27.80	11.26
Least Week (07/05/2011 map)	15.45	84.55	67.81	45.93	31.27	13.56
3 Months Ago (04/12/2011 map)	30.65	69.35	48.75	15.15	4.60	0.00
Start of Calendar Year (1/2/2011 map)	23.01	76.99	51.84	23.55	5.63	0.00
Start of Water Year (09/29/2010 map)	18.18	81.82	38.04	10.32	0.90	0.00
One Year Ago (07/06/2010 map)	61.05	38.95	7.10	0.00	0.00	0.00

Intensity:

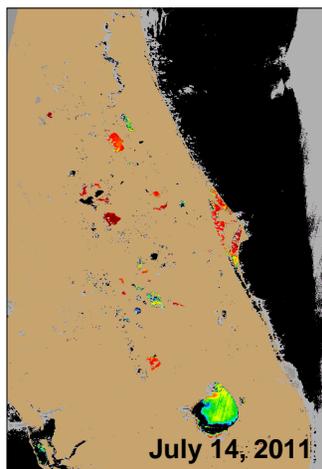
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



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