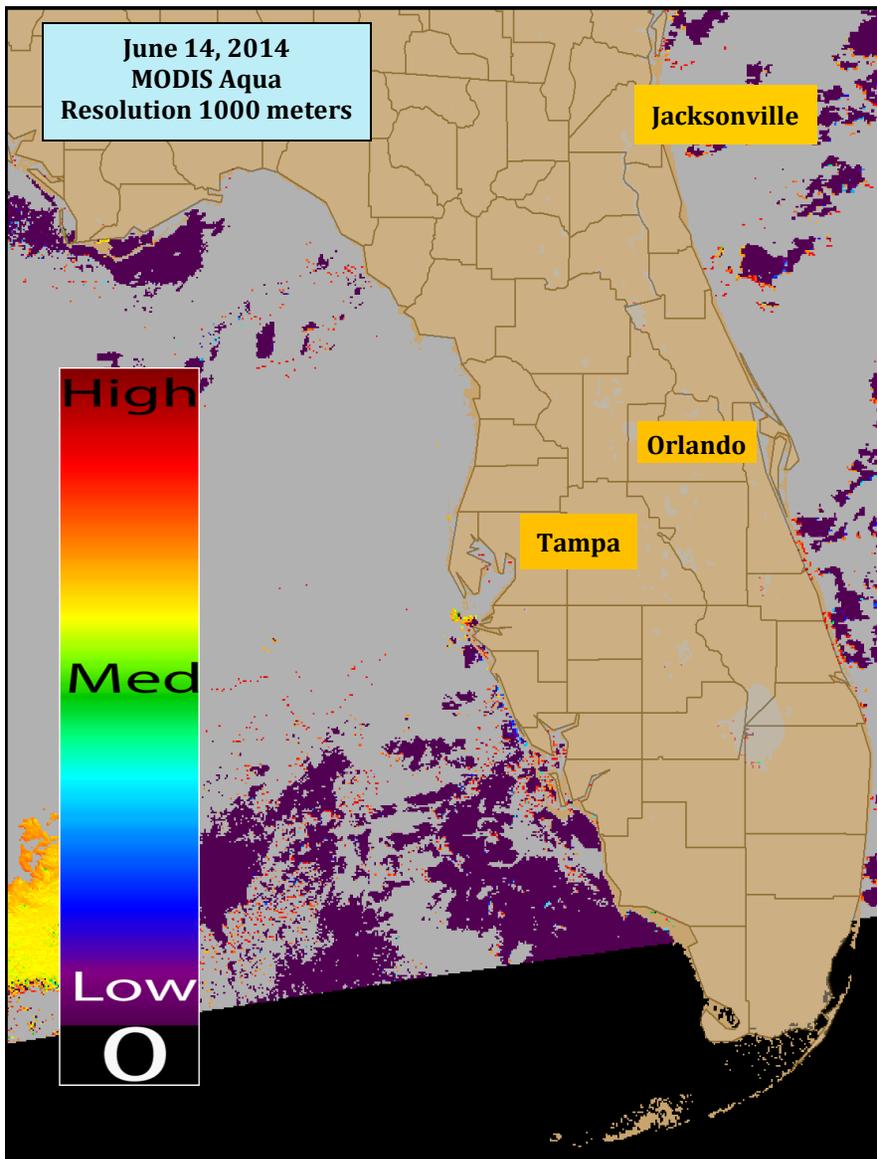


To report an illness related to a freshwater, estuarine, marine toxin or harmful algal bloom, please contact the Florida Poison Information Center at 1-800-222-1222.

Images/data are obtained from Florida Fish and Wildlife Research Institute, Florida Water Management Districts, National Oceanic and Atmospheric Administration (NOAA), NOAA National Climatic Data Centers and National Weather Centers. Support to produce this report comes from NOAA/NASA Contract NNH08ZDA001N.



June 14, 2014
MODIS Aqua
Resolution 1000 meters

High
Med
Low
0

CyanoHAB Conditions Report

- Due to significant cloud cover and/or severe glint over much of the state, no usable MODIS image is available for this week's bulletin.
- As shown in the true color image on page 2, cloud cover interfered with data collection and interpretation on June 14, 2014.

Rainy season fertilizer law making a difference

count on first **By Lucas Seiler, Charlotte County Reporter**
ON-LINE | ON-AIR | ON-THE-GO
Posted: Jun 16, 2014 5:50 PM | Updated: Jun 16, 2014 6:54 PM

A ban of harsh fertilizers to protect Southwest Florida's pristine waterways appears to be working.

The use of fertilizers containing nitrogen and phosphorus during the rainy season has been banned for six years. Although despite the findings, many people still aren't following strict guidelines.

"Our waterways are the reason why people come here," said Kurt Harclerode, Operations Manager for Lee County Natural Resources. "Our beaches, our rivers... that's why people come to Southwest Florida."

Although, our region has its share of water quality issues. For example, some blame fresh water releases from Lake Okeechobee for putting a damper on our coast's ecology, tourism and the economy. That, and something as simple as treating our lawns.

"Fertilizers have phosphorus and nitrogen," said Harclerode. "Those are things plants need to survive."

But an excessive amount, combined with heavy rainfall during the summer, creates harmful algae blooms and red tide. That's why an ordinance implemented in 2008 bans the use of the fertilizers containing phosphorous and nitrogen during the summer. Now, the region could be starting to see the positive changes.

"I've noticed a difference, even in my lake," said Bob Walsh of RS Walsh Landscaping in Fort Myers.

Walsh said he's noticed the lakes and streams are improving, especially the waterways near the land he treats, and that people are finally starting to realize the importance of the ban.

"There's so many complaints," he said. "We constantly complain about polluted water and water coming out of Lake Okeechobee. I think it's really important we take care of our own water."

If you're treating your lawn, look for three numbers on your fertilizer - the first two number must read "zero, zero" for it to be legally applied to your lawn in the summer.

To see video, go to: <http://www.nbc-2.com/story/25790982/rainy-season-fertilizer-law-making-a-difference#.U6ASBJVOWUk>

Status reports for Florida red tide are suspended until bloom conditions reoccur.

MODIS Images display a chlorophyll-a index generated with a Moderate Resolution Imaging Spectroradiometer provided by the National Aeronautics and Space Administration (NASA)

Very low likelihood of a bloom

May indicate clouds or missing data

Low estimated chlorophyll-a concentrations

Medium estimated chlorophyll-a concentrations

Higher estimated chlorophyll-a concentrations

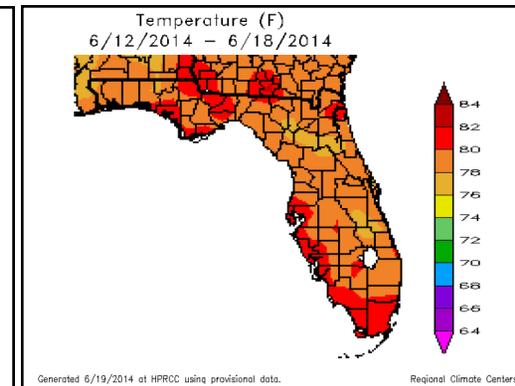
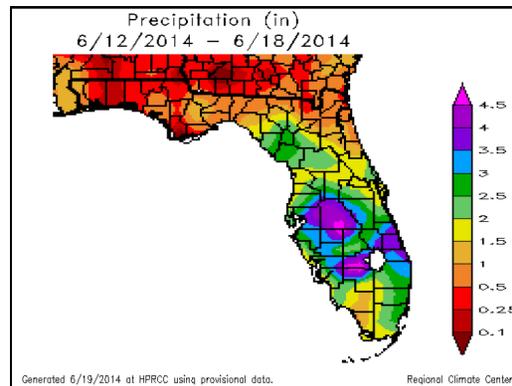
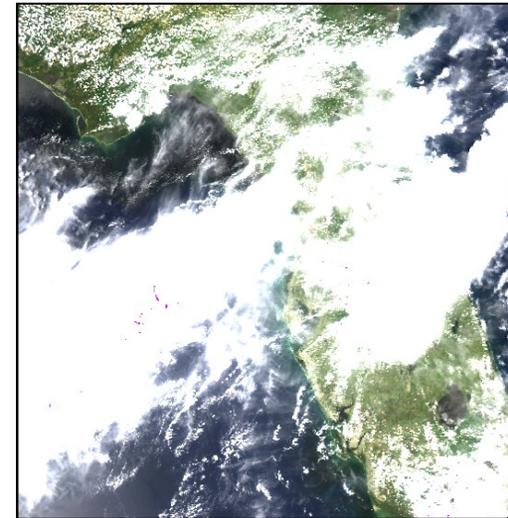
Interpreting Moderate Resolution Imaging Spectroradiometer Data

- The Moderate Resolution Imaging Spectroradiometer (MODIS) is deployed by NASA onboard the Terra (EOS AM) and Aqua (EOS PM) satellite. It passes over the Earth, collecting new imagery every 1-2 days.
- This imagery is used as a surveillance tool. Data collected by the MODIS sensor are used to generate a chlorophyll-a index, which is used to forecast harmful algal blooms. The results are not specific to any one HABs species, and should be followed-up with onsite field observations. Data is only suggestive of a potential HAB event.
- MODIS uses a spectral band that is much coarser than MERIS; therefore, only select larger water bodies in FL are visible using this technology.
- MODIS is better at depicting low to medium chlorophyll-a concentrations. Once a potential bloom is depicted, a switch in algorithms may be used to improve the visibility. MODIS has a few spectral bands, which have higher resolution that are more comparable to MERIS. However, these bands do not cover all of FL.
- Several environmental factors may affect how results can be interpreted. For example, areas with abundant aquatic vegetation may present with a high chlorophyll-a index resulting in a false positive bloom reading.
- The sensor identifies 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.
- While patches of red or warm colors may indicate higher chlorophyll-a concentrations, these data have not been verified in most cases using ground-truth methods.

Weather Conditions: Precipitation and Temperature - 06/12/14 to 06/18/14

- 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.
- Cloud coverage can obscure imagery and create patches or gray areas on map and obscure bloom detection.

June 14, 2014 MODIS Aqua True Color Image



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/climate>

For information, please contact:
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