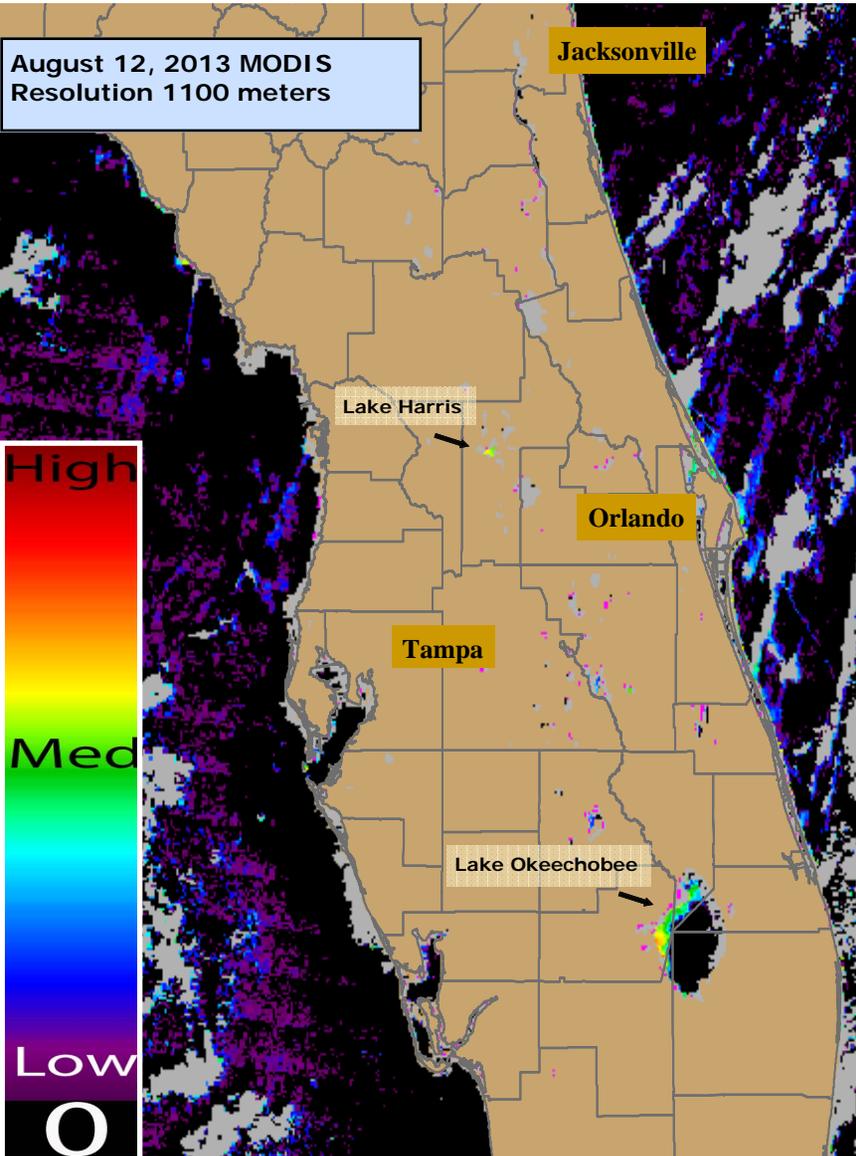


To report an illness related to a marine toxin or algal bloom contact the Florida Poison Information Center at 1-800-222-1222.

Images/data 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 from NOAA/NASA Contract NNH08ZDA001N.

August 12, 2013 MODIS Resolution 1100 meters



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

## Weather improves for Assessment of Inland HABs Conditions

- Lakes Harris (Lake County) displayed medium/high estimated elevated chlorophyll-a concentrations
- Lake Okeechobee displayed medium estimated elevated chlorophyll-a concentrations. Its difficult to tell from the true-color imagery (both 1km and 300m) if this there is a surface scum that is being flagged or just heavy aquatic vegetation. Feedback is sought for this anomaly.

## Senate Committee Workshop on IRL and Lake O' Basin: 8/22/13



**Committee Workshop #1 Short Term Options or Alternatives to Reduce or Eliminate the Current Releases from Lake Okeechobee**

The Florida Senate Select Committee on Indian River Lagoon and Lake Okeechobee Basin (IRLLOB) will meet on Thursday, August 22, 2013, from 1:00 p.m. to 9:00 p.m. at the Charles and Rae Kane Center in Stuart. This workshop is for receiving expert and public testimony on activities affecting water management in the Indian River Lagoon and Lake Okeechobee Basin. Specifically, participants will be asked to discuss the short term options or alternatives to reduce or eliminate the current releases from Lake Okeechobee. See: <http://www.flsenate.gov/topics/irllob>

[Also,] Senator Joe Negron (R-Stuart), Chair of the IRLLOB ... announced the creation of a microsite dedicated to collecting public comments on the economic and environmental impacts of ongoing releases from Lake Okeechobee as well as short-term solutions or alternatives ... The IRLLOB page [see link above] provides constituents an easy way to access information and provide feedback to members of the committee who are tasked with investigating policies, spending, and any other governmental activities affecting water management in the Indian River Lagoon and Lake Okeechobee Basin.

**\*\* Due to background levels of *K. brevis* off Florida's SW coast, status reports for Florida red tide will be suspended until bloom concentrations re-occur.**

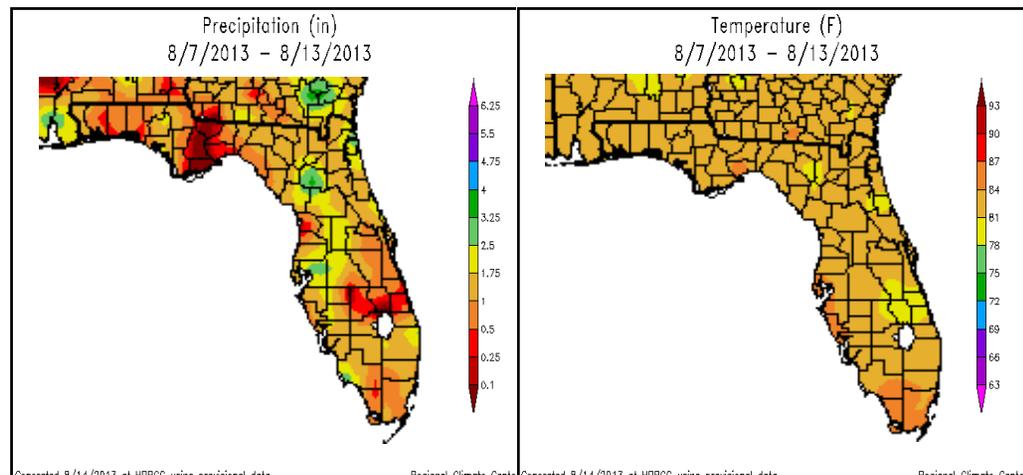
## Interpreting Moderate Resolution Imaging Spectroradiometer Data

- 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 which 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 so 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 although 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 Chl-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: Temperature and Precipitation - 8/7/13 to 8/13/13

- 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.

August 12, 2013  
MODIS 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/>



**For Individual Weather Station Data-Visit:**  
<http://www.sercc.com/perspectives>

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