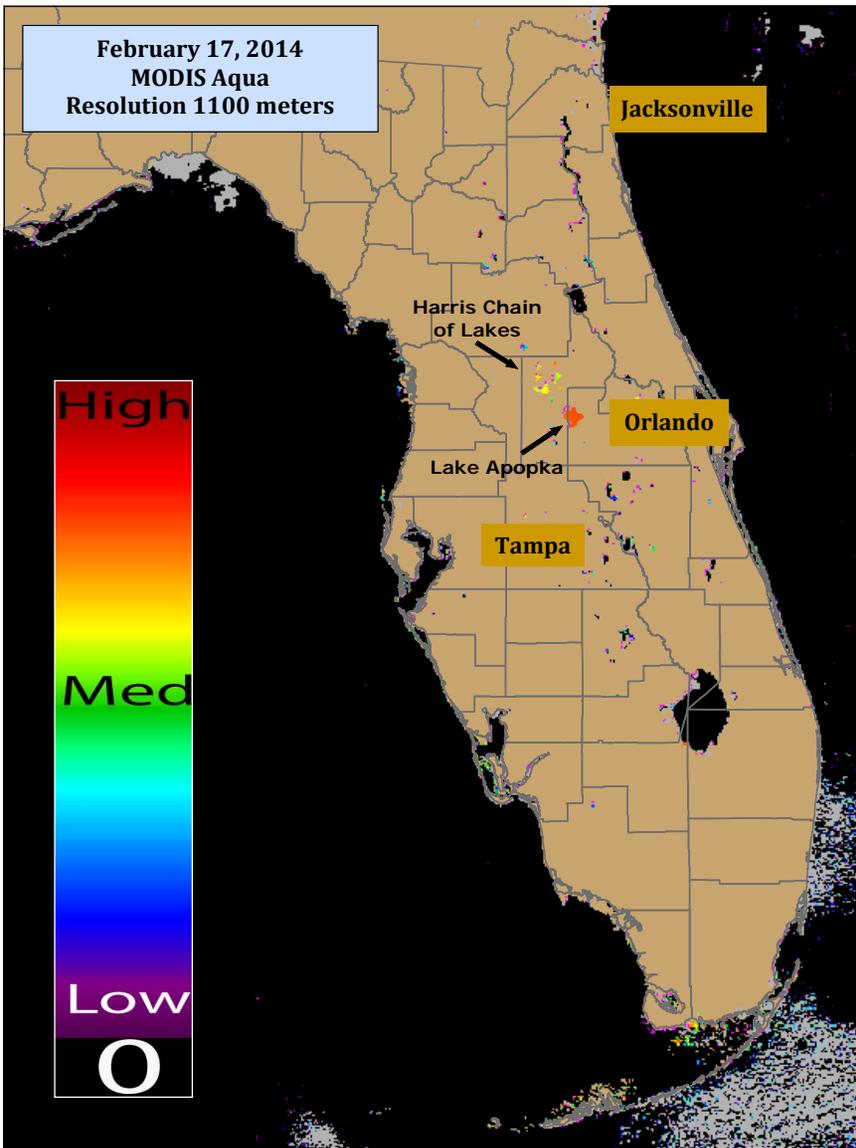


To report an illness related to a freshwater, estuarine, marine toxin or harmful algal bloom, please contact the Florida Poison Information Center at 1-800-222-1222. Images/data obtained from Florida Fish and Wildlife Research Institute, Florida Water Management Districts, National Oceanic and Atmospheric Administration (NOAA), NOAA National Climatic Data Centers and National Weather Centers. Support to produce this report from NOAA/NASA Contract NNH08ZDA001N.



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

## CyanoHAB Conditions Report

- Lake Apopka (Orange/Lake Counties) displayed a high estimated elevated chlorophyll-a concentration.
- Harris Chain of Lakes (Lake County) displayed medium estimated elevated chlorophyll-a concentrations.

## State senator: Loosen Corps' control over Lake O releases



**Negron wants Congress to allow state water managers to coordinate issue**



A state senator has once again asked Florida's congressional delegation to push for legislation to remove the Army Corps of Engineers [ACE] sole jurisdiction over Lake Okeechobee water releases. Joe Negron, R-Stuart, and chair of the Senate Select Committee on Indian River Lagoon and Lake Okeechobee Basin, .... "Over the last few months, the ACE has demonstrated a willingness to be more proactive and coordinate with the South Florida Water Management District to manage lake levels. This experience demonstrates the state water managers and the ACE can work effectively together," .... "However, the fact remains the ACE has sole jurisdiction and authority over lake levels and acts within that authority even when those actions conflict with the state water managers' better judgment ..." Congress gave the Army Corps authority to manage the water level of Lake Okeechobee after the flooding in New Orleans from Hurricane Katrina.

A risk assessment of the Herbert Hoover Dike found it to be in serious disrepair. In response the Army Corps implemented a schedule that would require water releases during the wet season to reduce the risk of a dike breach or failure. Negron wants Congress to require the Corps to develop a new risk assessment and lake level schedule accounting for rehabilitation that has been completed or is ongoing. A Florida Senate report in November suggested the Florida Department of Environmental Protection have the power to decide on releases when the risk of dike failure is less than 10 percent .... Wayne Daltry, president of the Caloosahatchee River Citizens Association, doesn't think the state should be given the water release responsibility. "South Florida Water Management District has a nonexistent environmental water supply record under the operations of Lake Okeechobee and the Caloosahatchee River, since 1999," he wrote in an email. "Until the river has a legally defensible water right, in volumes, SFWMD should not be in the driver seat, since they are co-opted by their own permits."

See: <http://www.news-press.com/article/20140219/NEWS01/302190027/State-senator-Loosen-Corps-control-over-Lake-O-releases>

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

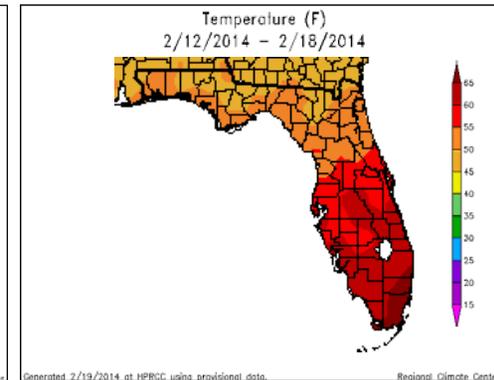
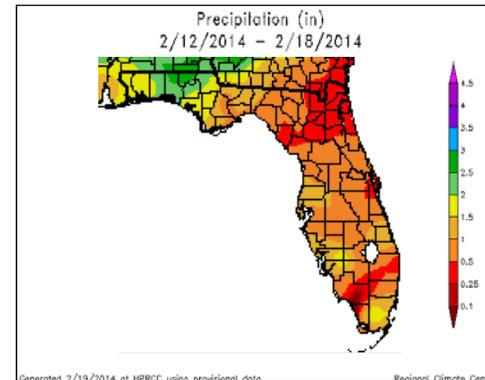
## Interpreting Moderate Resolution Imaging Spectroradiometer Data

- 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: Precipitation and Temperature - 02/12/14 to 02/18/14

- 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.

February 17, 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/perspectives>

For information, please contact: Andrew Reich, Public Health Toxicology Program at 850.245.4187 or [andy.reich@flhealth.gov](mailto:andy.reich@flhealth.gov)