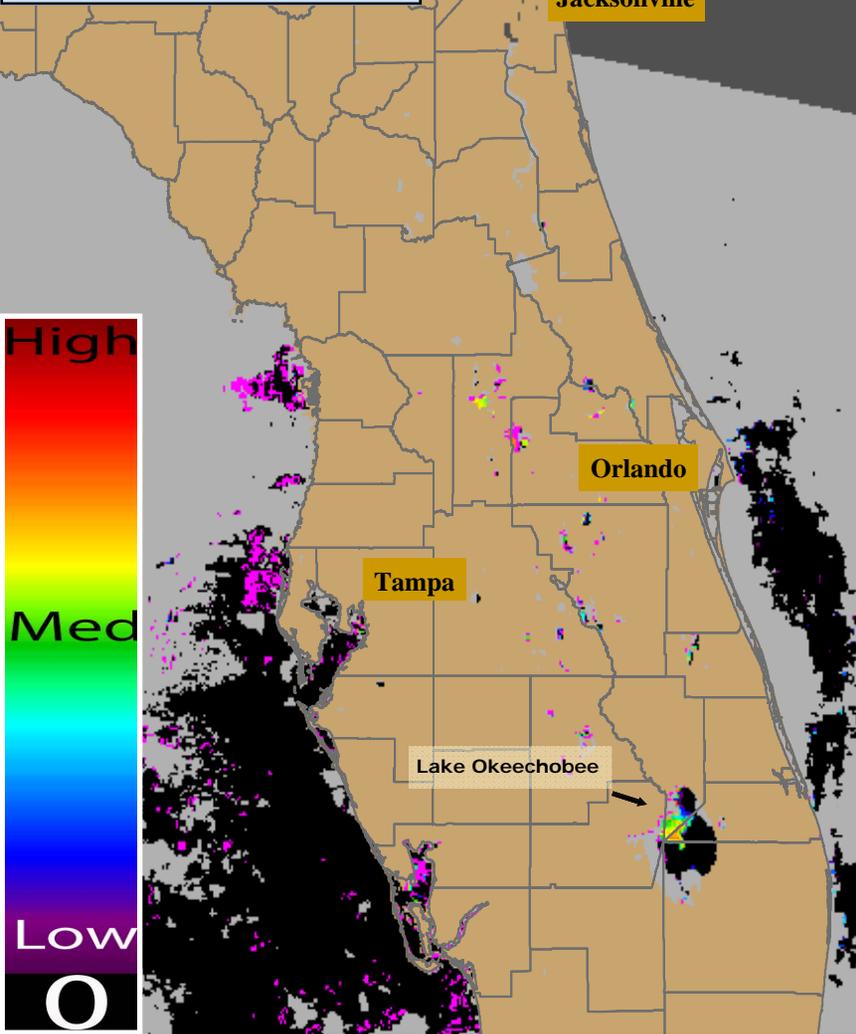


To report an illness related to a marine toxin or algal bloom contact the Florida Poison Information Center at 1-800-222-1222.

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 24, 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

Lake Okeechobee highlighted by MODIS

- Due to cloud cover and glint conditions, much of the central part of state is unavailable for assessment. Color identified in central Florida lakes is most likely due to model saturation.
- Lake Okeechobee imagery was excellent and displayed medium to medium/high estimated elevated chlorophyll-a concentrations in the northern part of the lake, including areas with open water. Information is sought to truth this area.

US Army Corps of Engineers: About Herbert Hoover Dike



US Army Corps of Engineers
JACKSONVILLE DISTRICT



Herbert Hoover Dike (HHD) is a 143-mile earthen dam that surrounds Lake Okeechobee, the heart of the Kissimmee-Okeechobee-Everglades system.

The original dike was constructed with gravel, rock, limestone, sand, and shell. The project reduces impacts from flooding as a result of high lake levels for a large area of south Florida.

Since 2007, the Corps has made a significant investment, over \$300 million, in projects designed to reduce the risk of catastrophic failure of the aging structure. Actions taken include installing a cutoff wall, removing and replacing water control structures (culverts), and conducting a variety of studies and technical reviews to help ensure the safety of south Florida residents.

See: <http://www.saj.usace.army.mil/Missions/CivilWorks/LakeOkeechobee/HerbertHooverDike.aspx>

For current water level see:
<http://w3.saj.usace.army.mil/h2o/currentLL.shtml>



**** 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.**

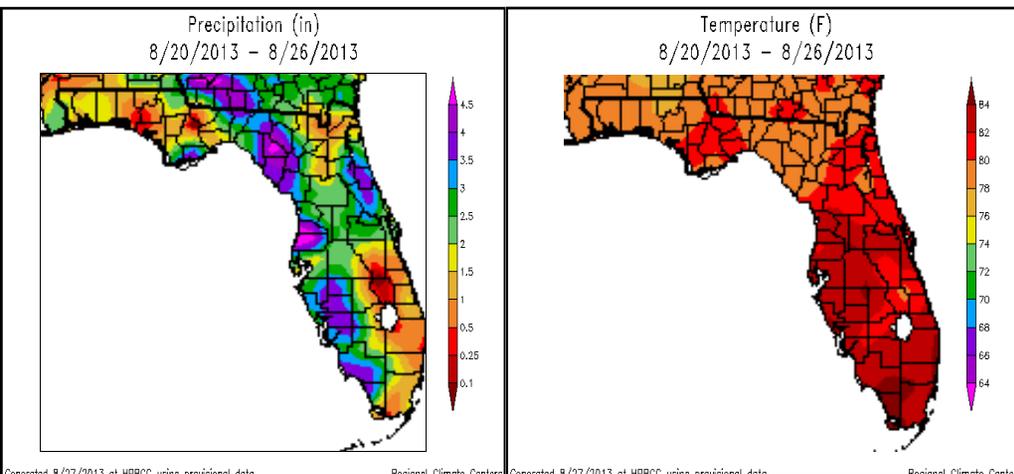
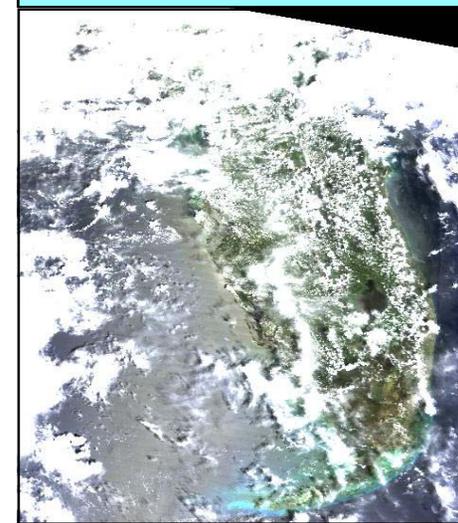
Interpreting Moderate Resolution Imaging Spectroradiometer Data

- 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 - 8/20/13 to 8/26/13

- 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 24, 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>

Questions about the bulletin or suggestions- Contact
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