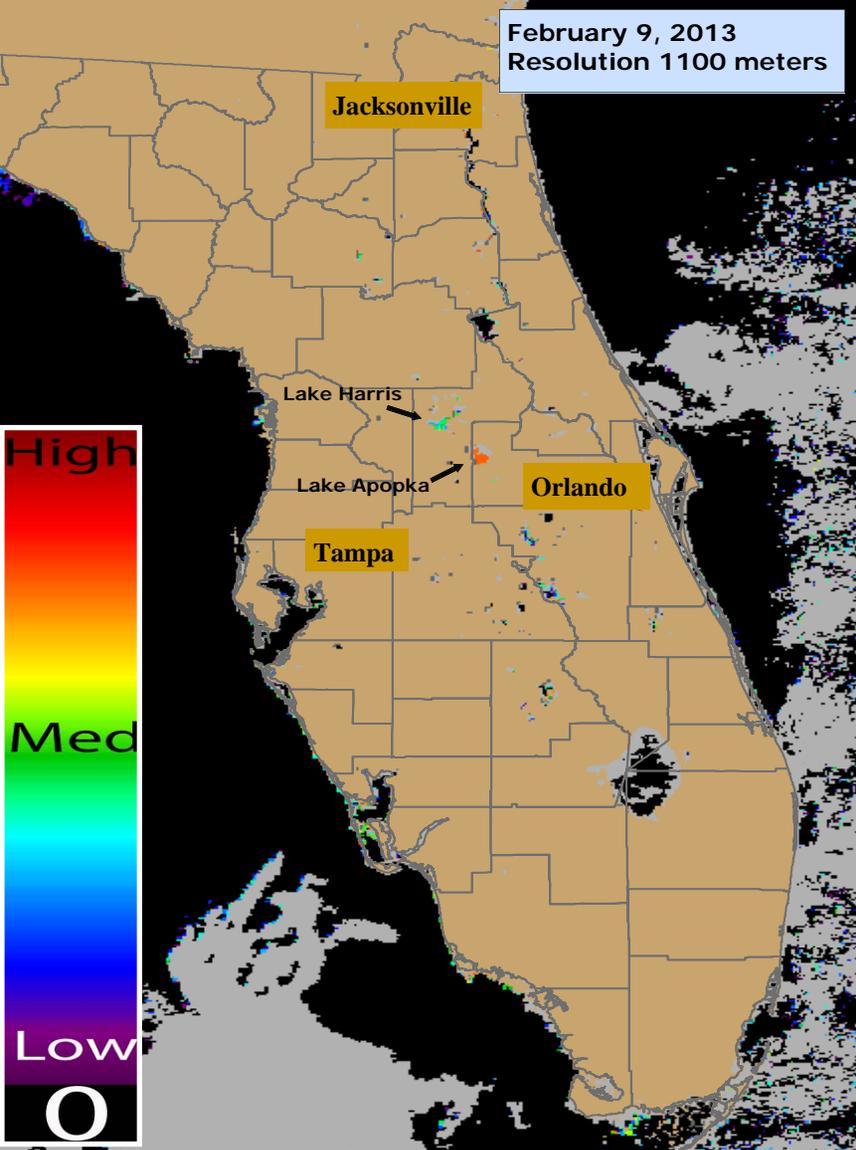
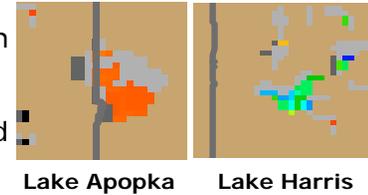


To report an illness related to a marine toxin or algal bloom contact the Florida Poison Information Center at 1-800-222-1222. Images/data obtained from Florida Fish and Wildlife Research Institute, Florida Water Management Districts, National Oceanic and Atmospheric Administration (NOAA), NOAA National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



Inland HABs Conditions Report: February 14, 2013

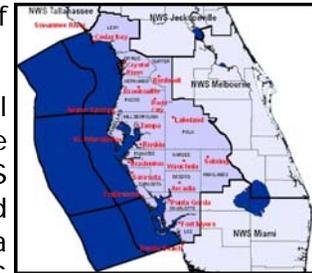
- Lake Apopka (Orange and Lake Counties) displayed high estimated elevated chlorophyll-a concentrations.
- Lake Harris (Lake County) displayed medium estimated elevated chlorophyll-a concentrations.



National Weather Service Beach Hazard Statement Test Product

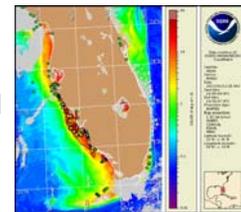
NOAA's HAB Operational Forecast System Team announced a new HAB-themed National Weather Service (NWS) Beach Hazard Statement (BHS) test product. The HAB BHS will be disseminated when analysts forecast moderate and/or high respiratory impacts for a confirmed bloom present alongshore from Levy to Lee counties (NWS WFO Tampa Bay Area of responsibility).

The HAB BHS will provide information on the predicted level of respiratory impacts, counties affected, duration of the impacts and general precautionary information. The HAB BHS will be available, along with the other coastal hazard messages, through a variety of means including the Tampa Bay Area NWS web page (weather.gov/tampa), the NWS home page (weather.gov), NOAA Weather Radio and NOAA Weather Wire Service. Partners and members of the public are encouraged to provide feedback regarding the BHS at: <http://www.nws.noaa.gov/survey/nws-survey.php?code=CHMBHS>



Marine Update: *K. brevis* bloom off Southwest Florida

Red Tide Update - FWRI/FWC (Feb. 13): An ongoing *K. brevis* bloom persists off SW Florida with highest concentration (conc.) alongshore and inshore of Charlotte and Lee counties. Conc. ranging from background to medium were detected alongshore and inshore of Sarasota County, and very low to medium conc. were detected alongshore and inshore of Collier County. See: <http://myfwc.com/research/redtide/events/status/statewide/>



NOAA Conditions Report - (Feb. 14): Over the past few days, reports of respiratory irritation were received from Sarasota, Charlotte, Lee and Collier counties. Reports of dead fish were also received from Charlotte, Lee and Collier counties. Forecasted onshore winds Saturday may increase the likelihood of respiratory impacts alongshore southwest Florida. To read the full NOAA conditions report, visit: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

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 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 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.

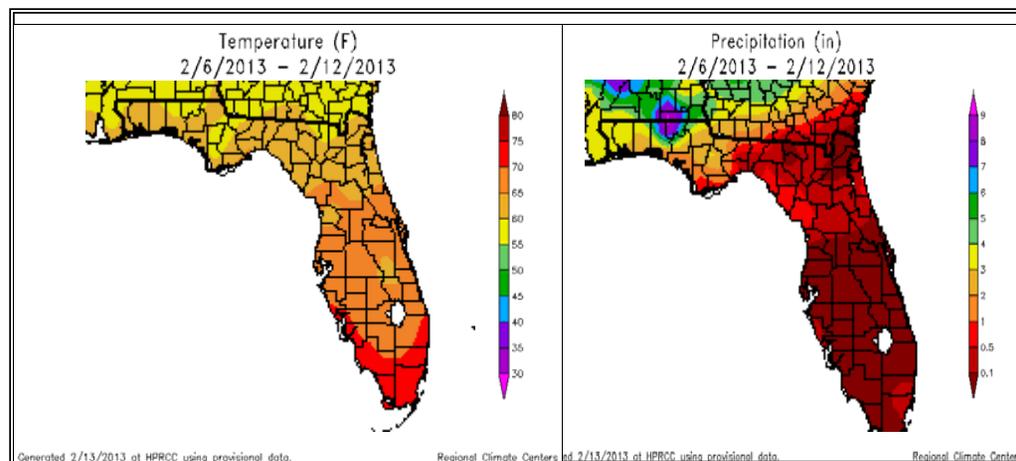
Weather Conditions: 2/6/13 - 2/12/13 Temperature and Precipitation



February 8, 2013
MODIS True Color Image



- 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.



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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