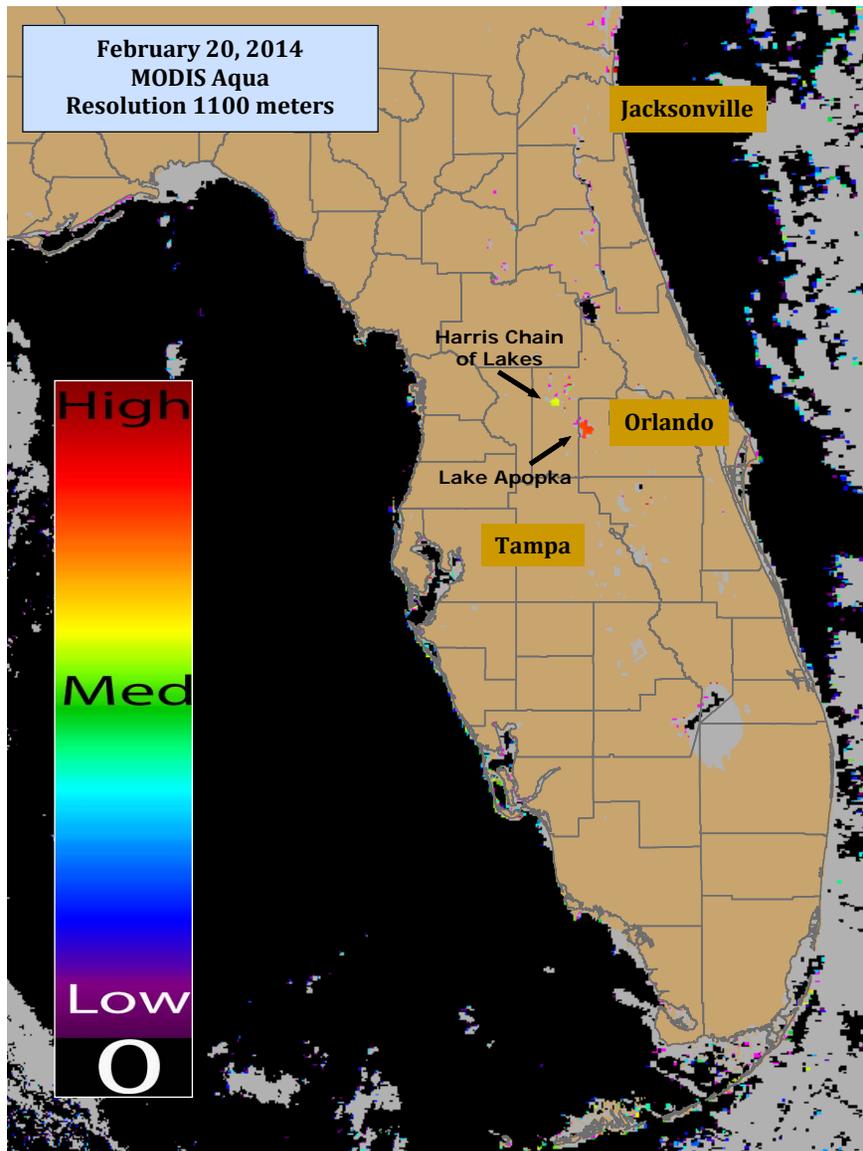


To report an illness related to a freshwater, estuarine, marine toxin or harmful algal bloom, please contact the Florida Poison Information Center at 1-800-222-1222. Images/data obtained from Florida Fish and Wildlife Research Institute, Florida Water Management Districts, National Oceanic and Atmospheric 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.
- Lake Harris (Lake County) displayed medium estimated elevated chlorophyll-a concentrations.

Opinion: EPA overreach is worth fighting, wherever it is



Written by Pam Bondi, Florida attorney general



As a fourth-generation Floridian, I care deeply about protecting our waterways and environment. I believe that Florida has always had the best expertise and resources to determine how to protect our waters, as does each unique state Fighting against federal government overreach has been one of my priorities as attorney general. And federal overreach is precisely what is at issue in American Farm Bureau Federation v. EPA.

While the details of that case involve the Chesapeake Bay, the principles at stake are far broader. Indeed, the federal court deciding the case explained that the “dispute, at its core, raises questions regarding the proper division of duties between the states and the federal government” under the Clean Water Act. Because of that critical issue, a coalition of 21 state attorneys general joined a friend-of-the-court brief defending individual states’ authority in environmental regulation The 21 states are not alone in objecting to this federal overreach. Eight counties in three affected states (Pennsylvania, Delaware and West Virginia) also filed a brief ... There are real consequences when the federal government acts beyond its authority.

Those who suggest that the attorneys general who joined the brief are anti-environment entirely miss the point. Everyone involved agrees that our environment must be protected. The issue is the division of federal and state authority. Florida has taken steps to protect its own resources: Recently, my office asked the U.S. Supreme Court to ensure that Florida receives its fair share of water flowing from Georgia, which is our best chance to save Apalachicola and the surrounding region from the devastation caused by Georgia’s overconsumption. I also ended years of litigation by working with the EPA to reach an agreement to protect Florida’s waterways from excess nitrogen and phosphorus pollution. The agreement between the EPA and Florida’s Department of Environmental Protection allowed Florida’s leaders, who know our waterways best, to implement sound criteria that will safeguard our water from excess nitrogen and phosphorus pollution. The best way to serve the cause of environmental protection is to recognize the states’ authority and be vigilant about EPA overreach. This brief is not about whether to protect the environment; it is about defending the role Congress gave states in protecting their own widely varying environments. I will remain steadfast in my efforts to stop the federal government from exceeding its authority and infringing on our rights.

**** 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.**

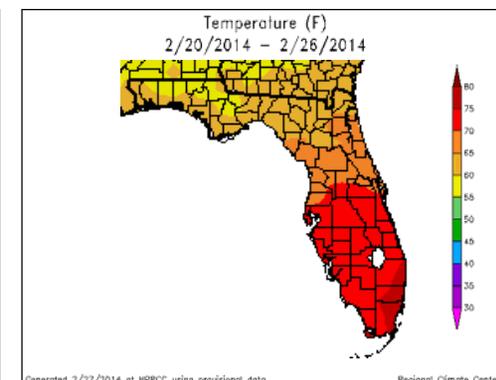
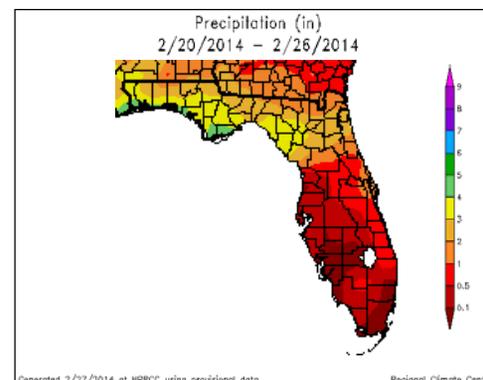
Interpreting Moderate Resolution Imaging Spectroradiometer Data

- 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 - 02/20/14 to 02/26/14

- 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 20, 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