

Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

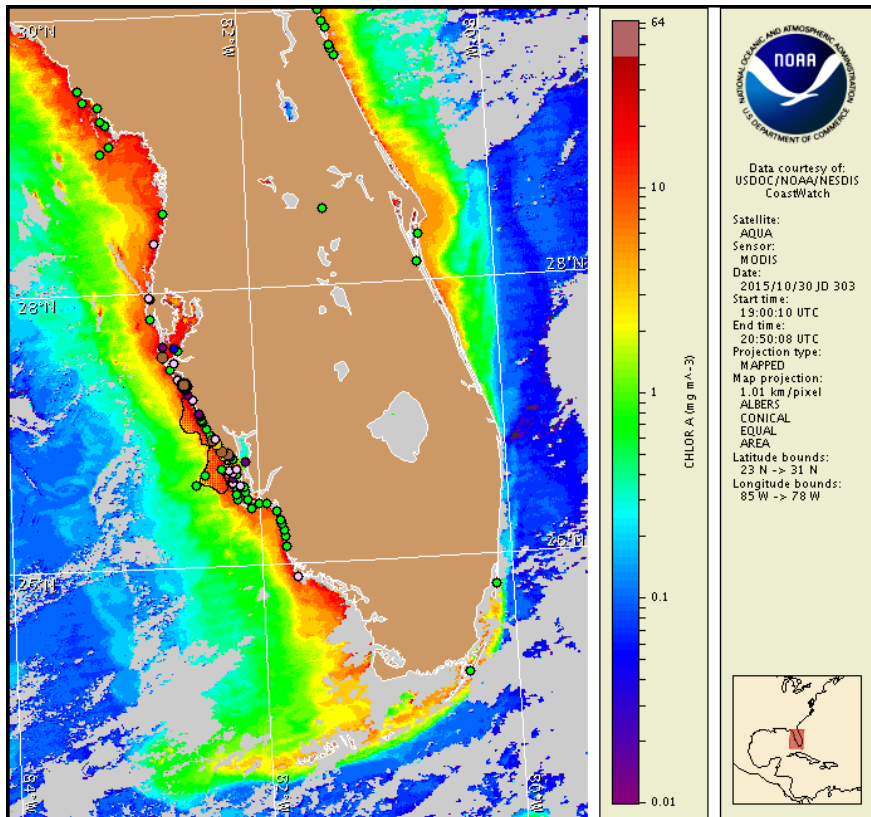
Monday, 02 November 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 29, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 23 to 30: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Karenia brevis (commonly known as Florida red tide) ranges from not present to high concentrations along the coast of southwest Florida, and is not present in the Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Monday, November 2 through Thursday, November 5 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Very Low (M), None (Tu-Th)

Southern Manatee: Low (M-Tu), None (W-Th)

Southern Manatee, bay regions: Low (M-Th)

Northern Sarasota: Low (M-Tu), Very Low (W-Th)

Northern Sarasota, bay regions: Moderate (M-Th)

Southern Sarasota: Low (M), Very Low (Tu-Th)

Northern Charlotte: Low (M), Very Low (Tu-Th)

Northern Charlotte, bay regions: Moderate (M-Th)

Southern Charlotte, bay regions: Moderate (M-Th)

Northern Lee: Very Low (M, W-Th), Low (Tu)

Northern Lee, bay regions: Low (M-Th)

All Other SWFL County Regions: None expected (M-Th)

All Other NWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#nwfl>

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Reports of respiratory irritation and dead fish have been received from alongshore Manatee and Sarasota County.

Analysis

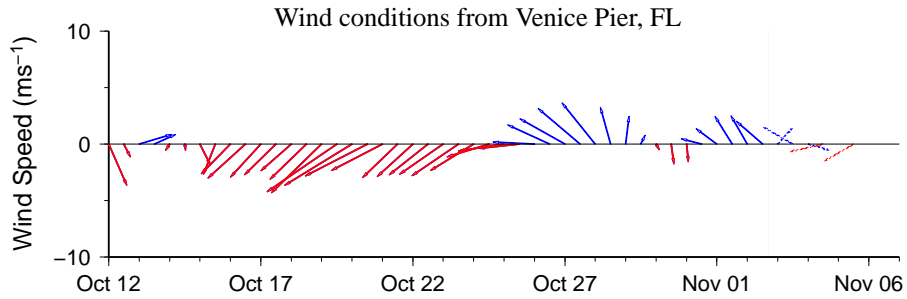
Recent samples collected along- and offshore southwest Florida from Pinellas to Collier counties indicate background to 'high' *Karenia brevis* concentrations, with the highest concentrations present in Sarasota Bay (FWRI, SCHD, MML, CCENRD; 10/23-10/30). Respiratory irritation has been reported in Manatee County at Coquina Beach and in Sarasota County with moderate levels reported at Manasota Beach and slight levels reported at Siesta Key (MML; 11/2). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

In recent ensemble imagery (MODIS Aqua, 10/30) patches of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible along- and offshore from Pinellas to Collier counties.

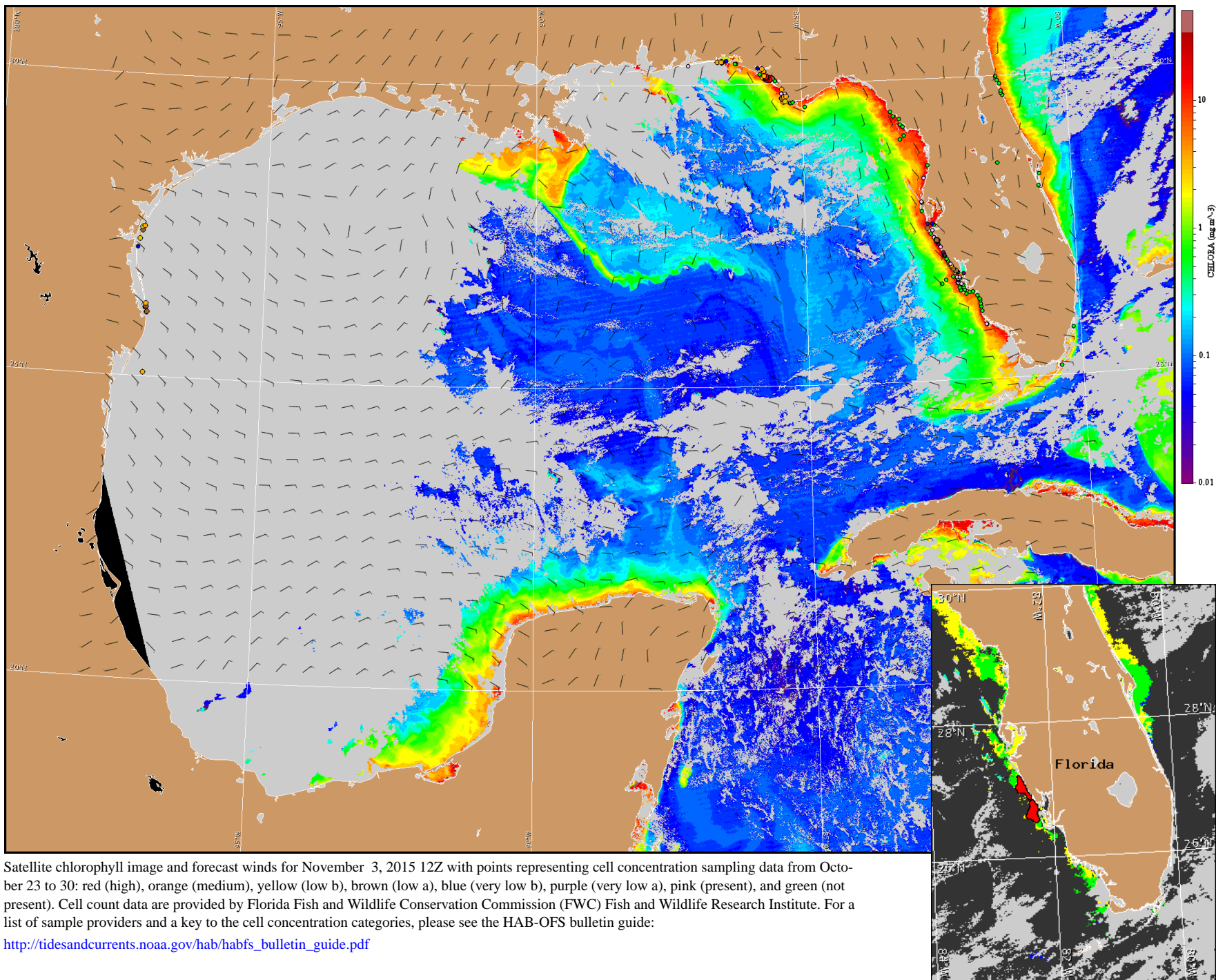
Variable winds forecasted today through Thursday will decrease the potential for transport of surface *K. brevis* concentrations alongshore southwest Florida. Forecasted winds today through Thursday are not favorable for intensification of *K. brevis* concentrations at the coast. - Lalime, Davis

Wind Analysis

Englewood to Tarpon Springs (Venice): South winds (5-15kn, 3-8m/s) today diminishing to (5kn, 3m/s) tonight. Southeast winds (5kn) Tuesday becoming southwest winds (5kn) in the afternoon. North winds (5kn) Tuesday night. East winds (5-10kn, 3-5m/s) Wednesday becoming northeast winds (10kn, 5m/s) Wednesday night. East winds (10kn) Thursday.



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Satellite chlorophyll image and forecast winds for November 3, 2015 12Z with points representing cell concentration sampling data from October 23 to 30: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).