



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

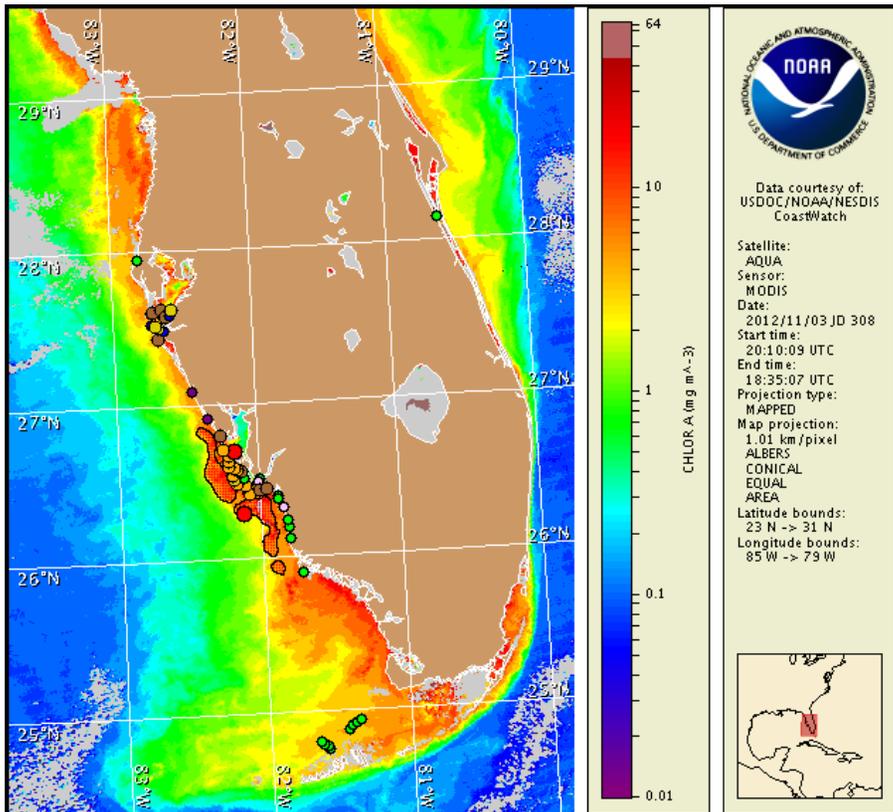
Monday, 05 November 2012

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, November 1, 2012



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from October 28 to November 2 shown as 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 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 the Florida FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/research/redtide/events/status/statewide/>

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

Conditions Report

A harmful algal bloom of *Karenia brevis* (commonly known as Florida Red Tide) is present along- and offshore from southern Pinellas to southern Collier counties. Patchy high respiratory impacts are possible today through Thursday in the Pine Island Sound region of Lee County. Alongshore southern Pinellas and Manatee counties, patchy low respiratory impacts are possible today through Wednesday, with patchy very low respiratory impacts possible Thursday. In the bay regions of southern Pinellas and Manatee counties, and in the San Carlos Bay region of central Lee County, patchy moderate respiratory impacts are expected today and Thursday, with patchy high respiratory impacts possible Tuesday and Wednesday. Alongshore Sarasota County, patchy moderate respiratory impacts are possible today through Wednesday, with patchy very low respiratory impacts possible Thursday. Alongshore Charlotte County, patchy very low respiratory impacts are possible today through Wednesday. In the Gasparilla Sound region of Charlotte County, patchy low respiratory impacts are possible today through Thursday. Alongshore southern Lee County, patchy high respiratory impacts are possible Tuesday. Patchy moderate respiratory impacts are also possible today and Wednesday, with patchy very low respiratory impacts on Thursday. Over the past several days, respiratory irritation and dead fish have been reported in southern Sarasota County. No impacts are expected elsewhere alongshore southwest Florida today through Thursday, November 8.

Analysis

A harmful algal bloom of *Karenia brevis* is present along- and offshore southwest Florida from southern Pinellas to southern Collier counties. Recent samples collected within the lower Tampa Bay region of southern Pinellas and northern Manatee counties indicate *K. brevis* concentrations range from 'not present' to 'low b' (FWRI; 10/31). In southern Sarasota, samples collected ranged from 'not present' to 'low b' (FWRI; 11/1-3). One sample collected from Bokeelia Island in the northern Pine Island Sound region of central Lee County indicated a 'high' concentration of *K. brevis* (FWRI; 10/31). Offshore northern Collier County, *K. brevis* sampling indicated 'medium' to 'high' concentrations 8.5 miles southwest of Sanibel Island. Recent sampling in northern Collier County indicated *K. brevis* concentrations range from 'not present' to 'background' (FWRI; 11/1). No samples have been received from southern Collier County in the past 10 days where recent sampling indicated 'medium' concentrations of *K. brevis* in the Marco Island region (FWRI; 10/22-25). Recent samples indicate *K. brevis* is not present in the Florida Keys (MML; 11/2).

Recent MODIS Aqua imagery (11/3; shown left) continues to show patches of elevated to very high chlorophyll (5 to >20 $\mu\text{g/L}$) stretching along- and offshore from southern Sarasota to southern Collier County. The patches with the highest chlorophyll are visible along- and offshore Charlotte, Lee, and Collier counties from 26°87'83"N 82°42'04"W to 26°43'79"N 82°17'36"W and from 26°42'95"N 82°04'10"W to 26°12'69"N 81°91'01"W. Elevated chlorophyll (2-7 $\mu\text{g/L}$) also is visible along- and offshore from Pinellas to Monroe County.

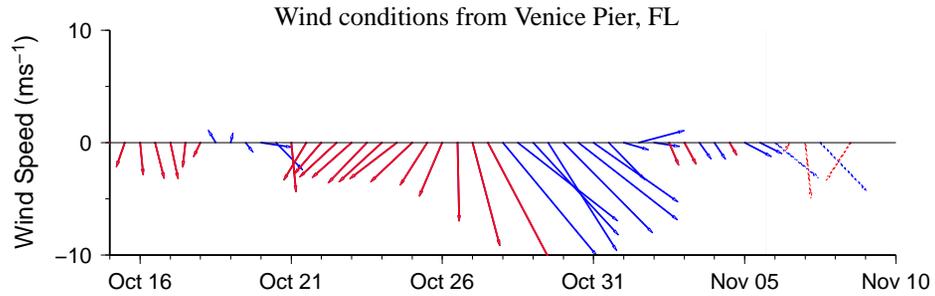
Forecasted winds today through Wednesday may increase the potential for respiratory impacts along the coast from southern Pinellas to Collier counties.

Davis, Fenstermacher

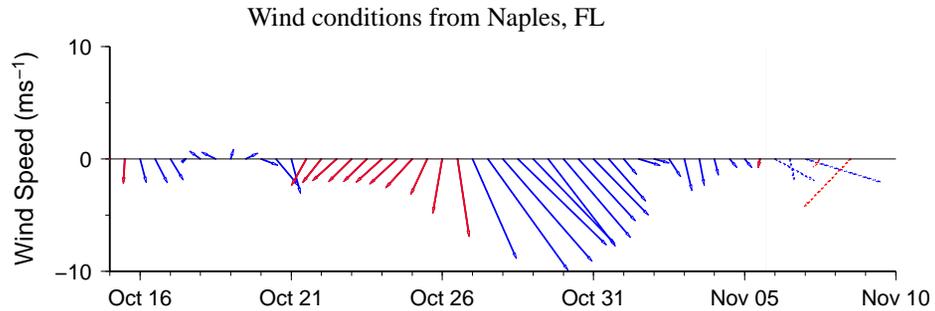
Wind Analysis

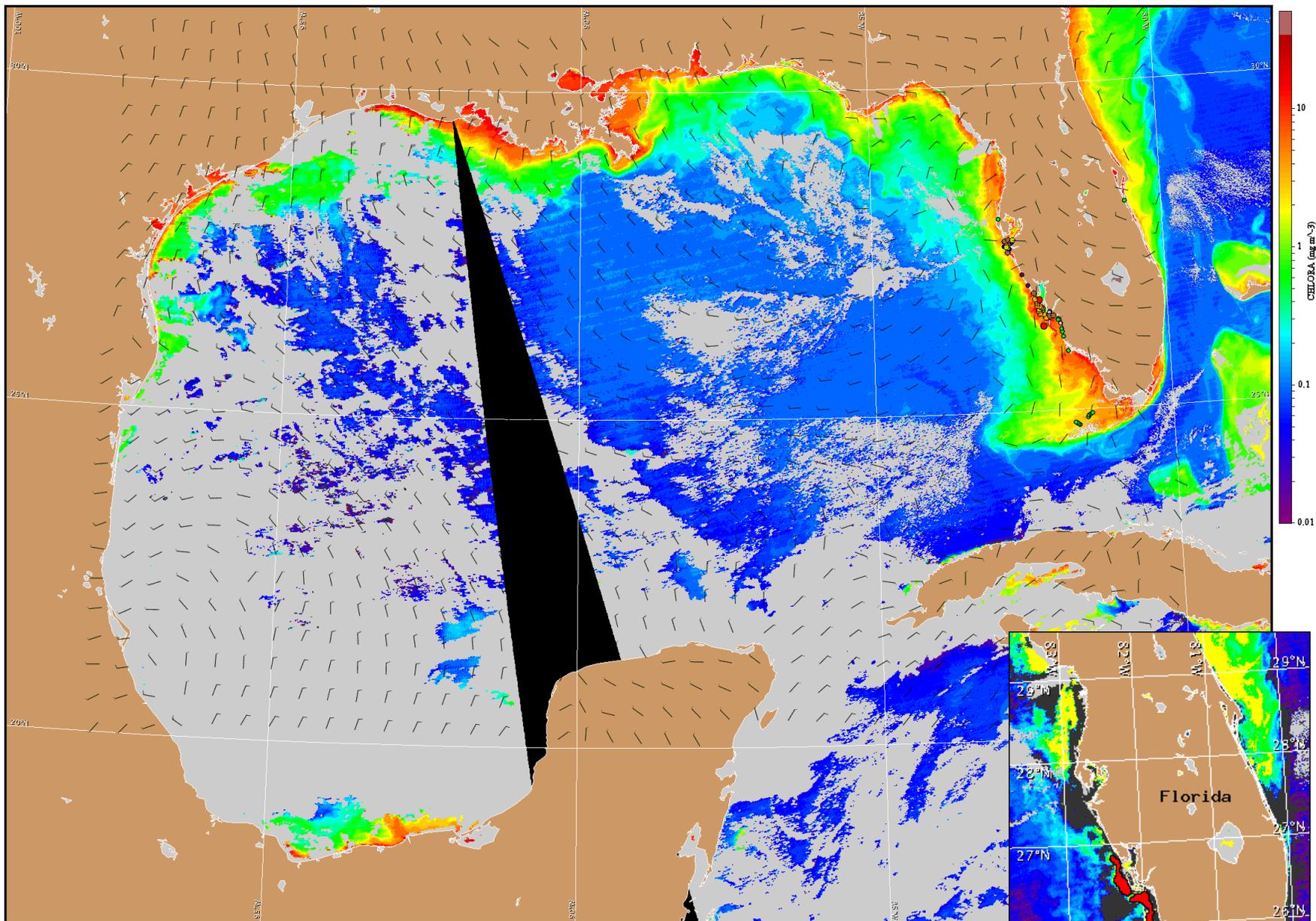
Venice: North winds (10 kn, 5 m/s) today becoming west after midnight. West winds (20 kn, 10 m/s) Tuesday becoming northwest winds (10-20 kn, 5-10 m/s) Tuesday night. Northwest winds (20 kn) Wednesday becoming north winds (10-15 kn, 5-8 m/s) after midnight. North winds (15 kn, 8 m/s) Thursday.

Naples: North northwest winds (5 kn, 3 m/s) today becoming west northwest (5-9 kn, 3-5 m/s) in the afternoon through tonight. West winds (5-9 kn) Tuesday becoming southwest winds (12-17 kn, 6-9 m/s) in the afternoon. Northwest winds (16-21 kn, 8-11 m/s) Wednesday becoming north northeast winds (10-15 kn, 5-8 m/s) Wednesday night and Thursday.



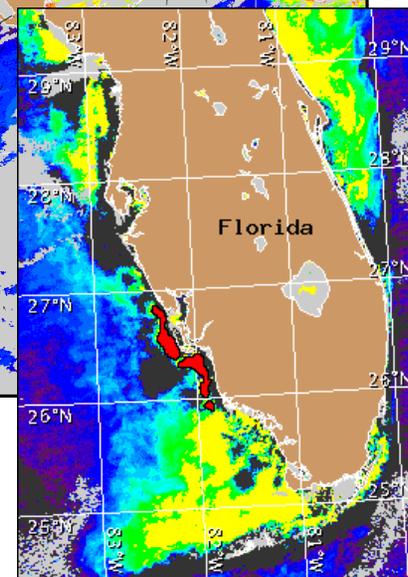
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for November 6, 2012 12Z with cell concentration sampling data from October 28 to November 2 shown as 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 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 of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).