



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

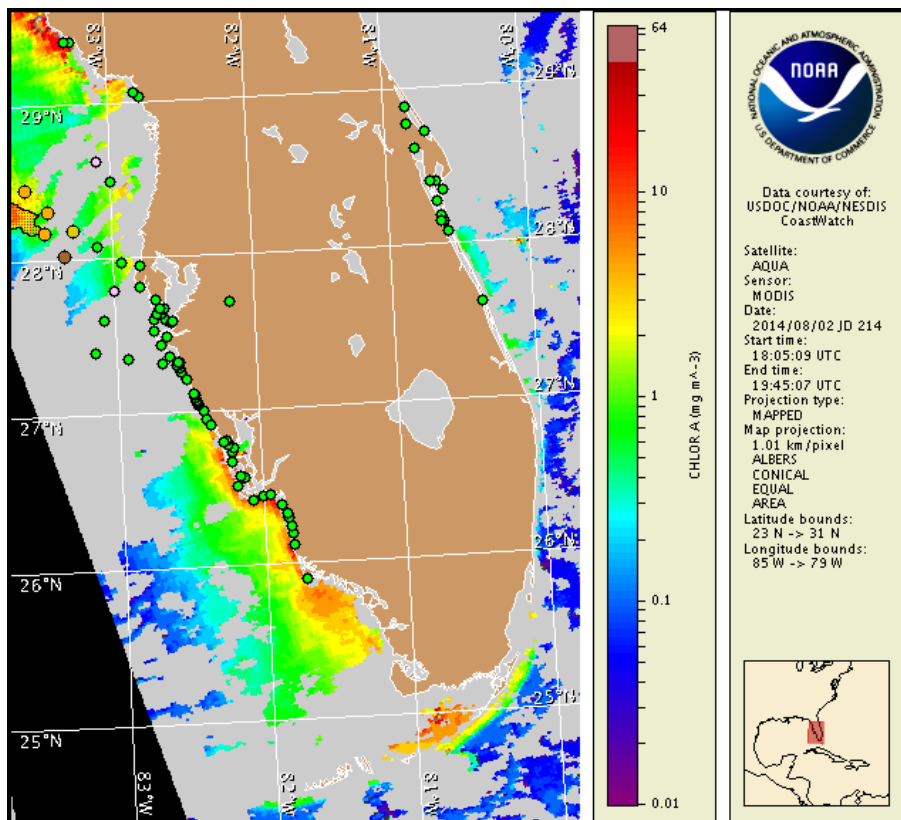
Monday, 04 August 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, July 28, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from July 25 to 31: 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](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 background concentrations along the coast of southwest Florida and is not present in the Florida Keys. *K. brevis* ranges from not present to medium concentrations offshore the coast of northwest Florida. No respiratory irritation is expected alongshore southwest Florida Monday, August 4 through Monday, August 11.

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations. Over the past several days, reports of dead fish, discolored water, and respiratory irritation have been received from offshore Levy, Citrus, Hernando, and Pasco counties.

## Analysis

**Dixie to Pasco County:** Samples collected along- and offshore northwest Florida over the past week identified not present to 'medium' concentrations of *Karenia brevis* 26-58 miles offshore Hernando and Pasco counties (FWRI; 7/31). Sampling up to 2 miles offshore Dixie County and alongshore and up to 2 miles offshore Levy County indicates that *K. brevis* is not present at the coast (FWRI; 7/28-29).

Recent MODIS Aqua imagery along- and offshore southwest Florida has been partially obscured by clouds over the past several days, limiting analysis. In MODIS Aqua imagery from 8/2 (shown left) and 7/31 (not shown), the previously reported feature of elevated chlorophyll (1-3  $\mu\text{g/L}$ ) continues to be visible offshore from Dixie to Pasco counties. Patches of this feature extend from 28°44'56.94"N 83°48'13.36"W to 28°10'54.26"N 83°32'24.14"W, approximately 50-80mi west of the coast.

Dead fish, discolored water, and respiratory irritation continue to be observed in the sampling area of the bloom offshore Dixie and southern Pasco counties (FWRI; 8/1). No reports of respiratory irritation have been received from alongshore Levy to Pasco County in the past week (FWRI, MML; 7/28-8/3).

Forecasted west to northwest winds over the next several days may promote southerly transport of the bloom identified offshore from Dixie to southern Pasco counties August 4 through August 8.

**Pinellas to Monroe County:** Samples collected over the past week along- and offshore the coast of southwest Florida from Pinellas to Collier County indicate that *Karenia brevis* is not present, with the exception of 'background' to 'low a' *K. brevis* concentrations identified in samples collected 13-30 miles offshore Pinellas County (FWRI, MML, SCHD, CCPCPD; 7/28-8/1). *K. brevis* concentrations identified offshore Pinellas County may be part of the bloom area that extends offshore between Dixie to southern Pasco counties.

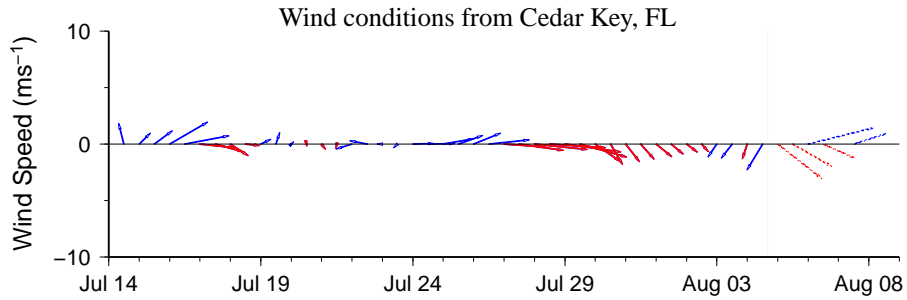
In MODIS Aqua imagery from 8/2 (shown left), elevated to high chlorophyll (3-16  $\mu\text{g/L}$ ) is visible along- and offshore from Charlotte to Collier counties.

Forecasted west to northwest winds over the next several days may promote southerly transport of *K. brevis* concentrations identified offshore Pinellas county from August 4 to August 8. ~Derner, Kavanaugh

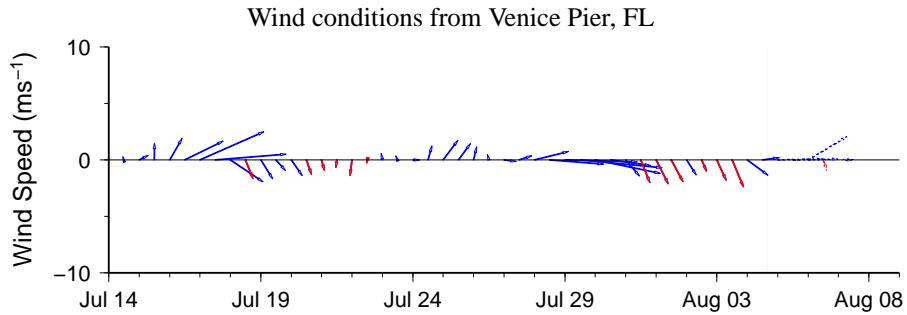
## Wind Analysis

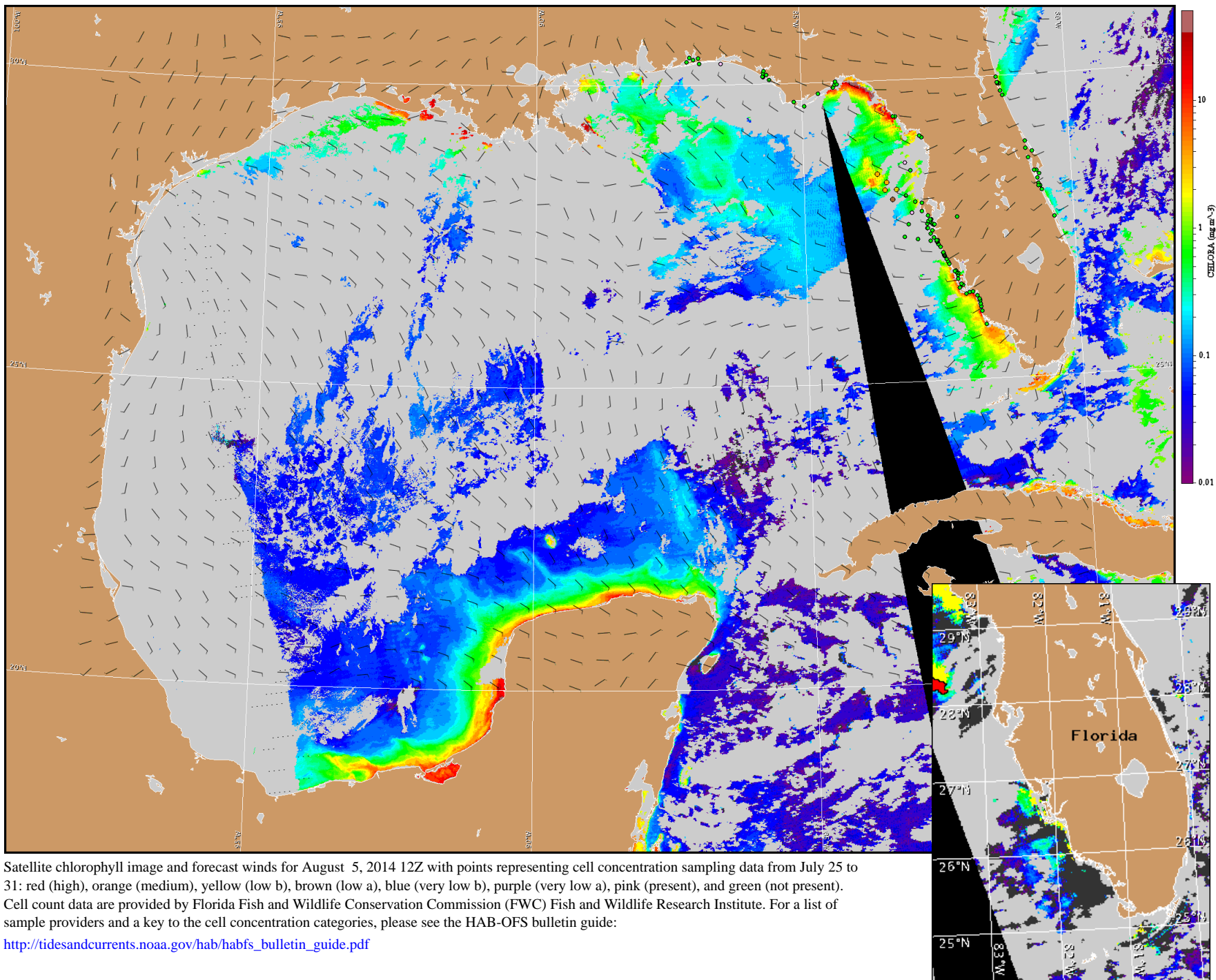
**Cedar Key, Florida:** North to northwest winds (10kn, 5m/s) today becoming west (5-10kn, 3-5m/s) tonight through Tuesday. West to northwest winds (10kn) Tuesday night. West winds (10-15kn, 5-8m/s) Wednesday and Thursday becoming northwest (5kn, 3m/s) after midnight on Thursday. West winds (10kn) Friday.

**Venice, Florida:** Northwest winds (10kn, 5m/s) today becoming west winds (5-10kn, 3-5m/s) tonight through Tuesday night then becoming northwest winds (5-10kn) Tuesday night through Wednesday. West winds (5-10kn) Wednesday afternoon. Northwest winds (5-10kn) Wednesday night through Thursday becoming north winds (5kn, 3m/s) after midnight. Northwest winds (10kn) Friday.



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 August 5, 2014 12Z with points representing cell concentration sampling data from July 25 to 31: 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 of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).