

# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

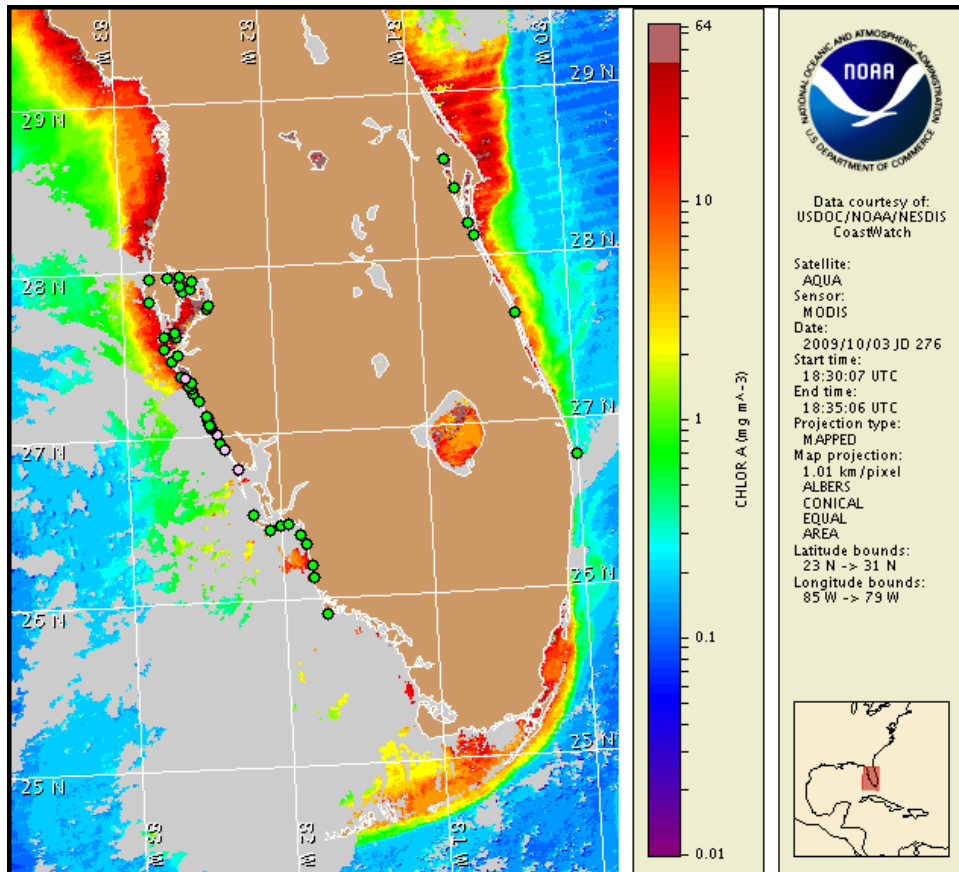
5 October 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: September 28, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 26 to October 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). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

## Conditions Report

There is currently no indication of a harmful algal bloom of *Karenia brevis* (Florida red tide) at the coast in southwest Florida, including the Florida Keys. Cloudy, brown discolored water has been reported alongshore Naples Pier in northern Collier County over the past week. This event is associated a bloom of the non-toxic algae *Guinardia flaccida*, which does not produce respiratory irritation impacts associated with the Florida red tide caused by *Karenia brevis*. No impacts due to Florida red tide are expected alongshore southwest Florida today through Monday, October 12.

## Analysis

There is currently no indication of a *Karenia brevis* bloom at the coast in southwest Florida. Background concentrations of *K. brevis* were identified in Sarasota and Charlotte Counties (SCHD, FWRI, MML; 9/28-10/2). A Very Lowa was also identified at North Jetty Park, Sarasota County (SCHD; 9/28). Additional samples taken alongshore Pinellas, Manatee, Sarasota, Charlotte, Lee, Collier, and Monroe counties, and offshore of Sarasota indicate that *K. brevis* is not present (FWRI, MML, SCHD; 9/28-10/2).

MODIS imagery is cloudy along the coast and limits analysis. Imagery indicates that chlorophyll remains high ( $>10 \mu\text{g/L}$ ) alongshore of Pinellas County and imagery from 10/2 continues to show features extending alongshore and offshore southern Lee and Monroe Counties. These are likely associated with non-harmful blooms of various algal species that continue to be detected alongshore southwest Florida. Samples from the alongshore regions did not contain *K. brevis* (FWRI, MML, SCHD; 9/28-10/2).

Discolored water reported alongshore Naples Pier in Collier County is associated with blooms of the non-toxic algae *Guinardia flaccida* (FWRI; 9/28). Dead fish were reported at Marco Island, Collier County (CCPCPD; 9/29). Dead fish and discolored water were also reported at Apollo Beach, Hillsborough County (FWRI; 9/30).

Variable wind conditions minimize the potential for *K. brevis* bloom formation at the coast this week.

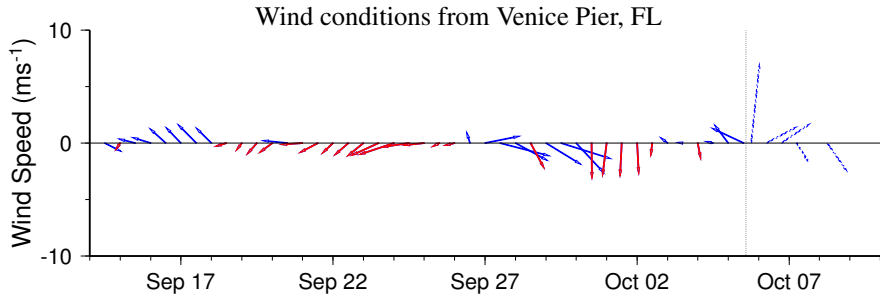
Due to technical difficulties SeaWiFS imagery is currently unavailable. MODIS imagery is displayed on this bulletin.

**\*\*Due to a Federal Holiday, the next bulletin will be issued on Tuesday, October 12.\*\***

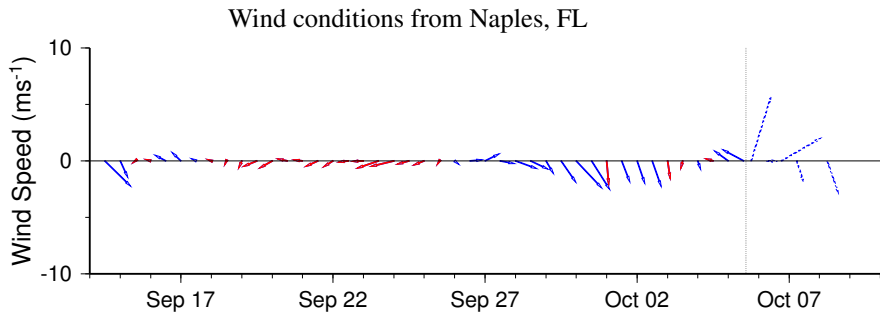
~Fenstermacher, Lindley

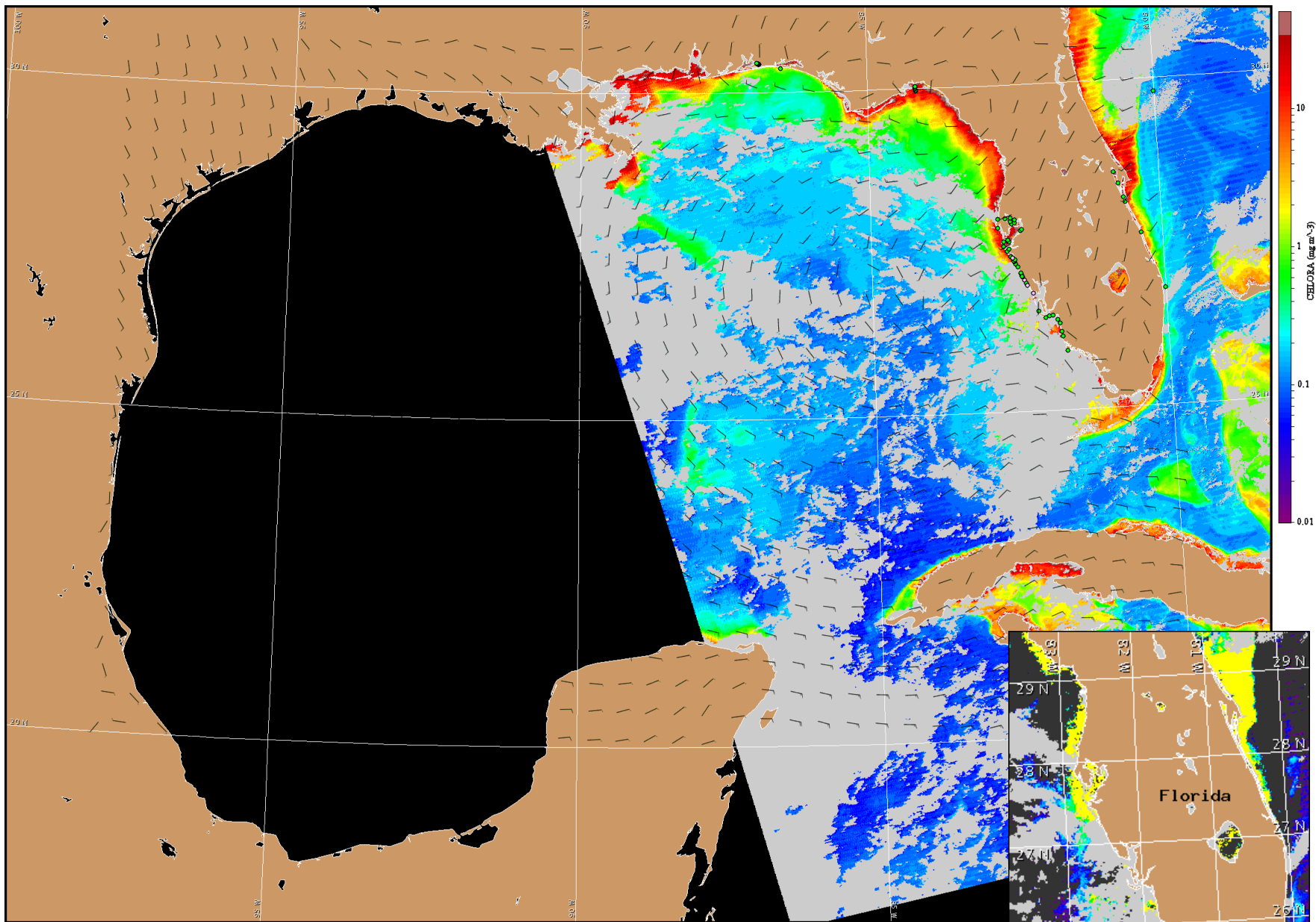
## Wind Analysis

Southwest winds today through Tuesday followed by southerlies on Tuesday night (10-15 kn; 5-8 m/s). North to northwesterlies on Wednesday and northeasterlies on Thursday (5-10 kn; 3-5 m/s). Northeasterlies on Thursday with easterlies Thursday night (5-10 kn; 3-5 m/s).



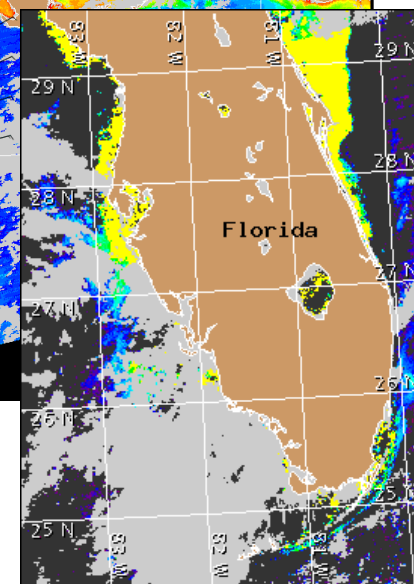
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for October 6, 2009 12Z with Cell concentration sampling data from September 26 to October 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). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS 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).