

## Gulf of Mexico Harmful Algal Bloom Bulletin

27 September 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: September 26, 2007

### Conditions Report

**NE Florida:** A harmful algal bloom has been identified in Nassau County. Patchy moderate impacts are possible in Nassau County through Sunday September 30.

**SW Florida:** Harmful algae has been identified in Lee County. No impacts are expected in southwest Florida through Sunday September 30.

### Analysis

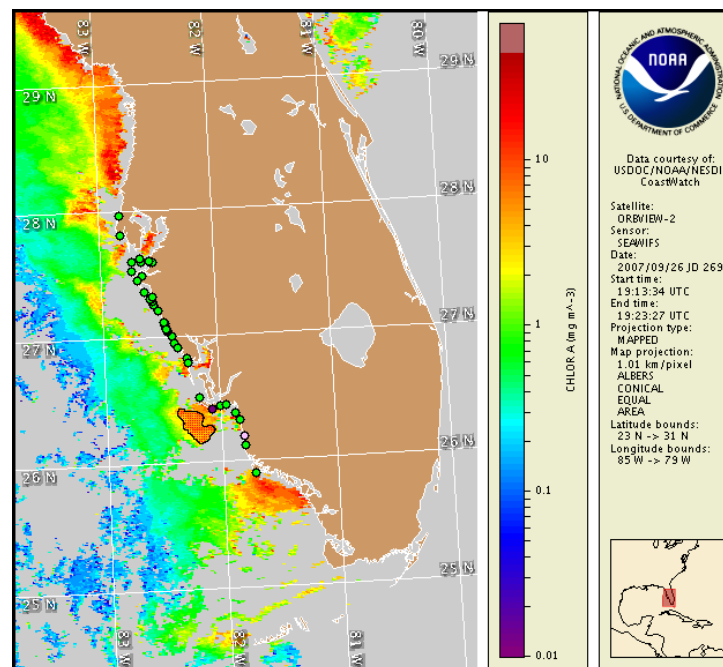
*\*\*This bulletin contains additional information to Supplemental Bulletin 2007-060.\*\**

**NE Florida:** A harmful algal bloom has been identified onshore in Nassau County. Medium concentrations of *Karenia brevis* have been confirmed at Fernandina Beach and Amelia Island (9/25-26, FWRI). Onshore winds are likely to cause patchy moderate impacts along the coast through Monday, October 1. Southward transport is likely, potentially as much as 30-50 km by Monday. Satellite imagery shows variable chlorophyll levels due to several non-harmful blooms, as well as resuspended material along the coast. Regions of high chlorophyll (greater than  $10 \mu\text{g/L}$ ) are located as far south as  $29^{\circ}43.8'N$   $81^{\circ}8.7'W$ , with a maximum concentration at  $30^{\circ}36.5'N$   $81^{\circ}19.7'W$  (based on 9/26 satellite imagery). Discolored water may be a poor indicator of the presence of *K. brevis* along Amelia Island, due to the known presence of non-harmful blooms prior to 9/13. Continued resuspension is likely through the weekend. Additional information will be disseminated as it becomes available.

**SW Florida:** *Karenia brevis* has also been confirmed onshore in Lee County. In addition to the background concentrations noted in Supplemental Bulletin 2007-060 at Clam Pass in Collier County (9/24, FWRI), very low concentrations have been confirmed at Sanibel Island in Lee County (9/26, FWRI). Patches of elevated chlorophyll have been detected via satellite imagery (9/26) offshore southern Lee and northern Collier Counties, and alongshore southern Collier County. Chlorophyll levels range from  $6\text{--}7 \mu\text{g/L}$  offshore Sanibel Island, with maximum levels ( $7\text{--}10 \mu\text{g/L}$ ) at  $26^{\circ}17.4'N$   $82^{\circ}5.8'W$  and  $26^{\circ}25.0'N$   $82^{\circ}19.3'W$ . Regions of high chlorophyll extend south of Cape Romano with a maximum level visible offshore at  $25^{\circ}47.2'N$   $81^{\circ}38.4'W$  and nearshore at  $25^{\circ}43.7'N$   $81^{\circ}21.6'W$ . Offshore winds will decrease the potential for impacts along the coast over the weekend, however conditions are highly favorable for intensification and formation of a harmful algal bloom. Continued sampling is recommended. -Allen, Fisher

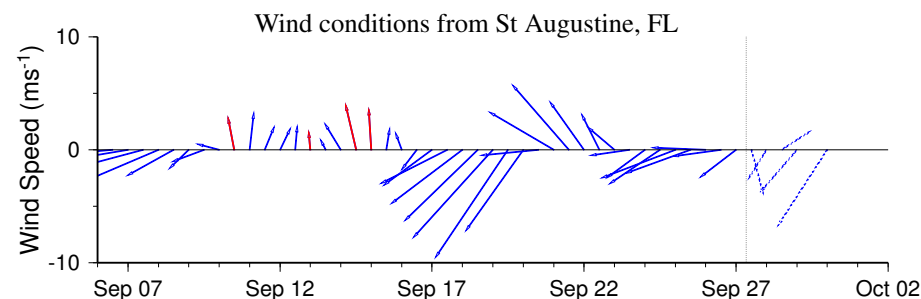
Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

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.



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 17 to 27 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:

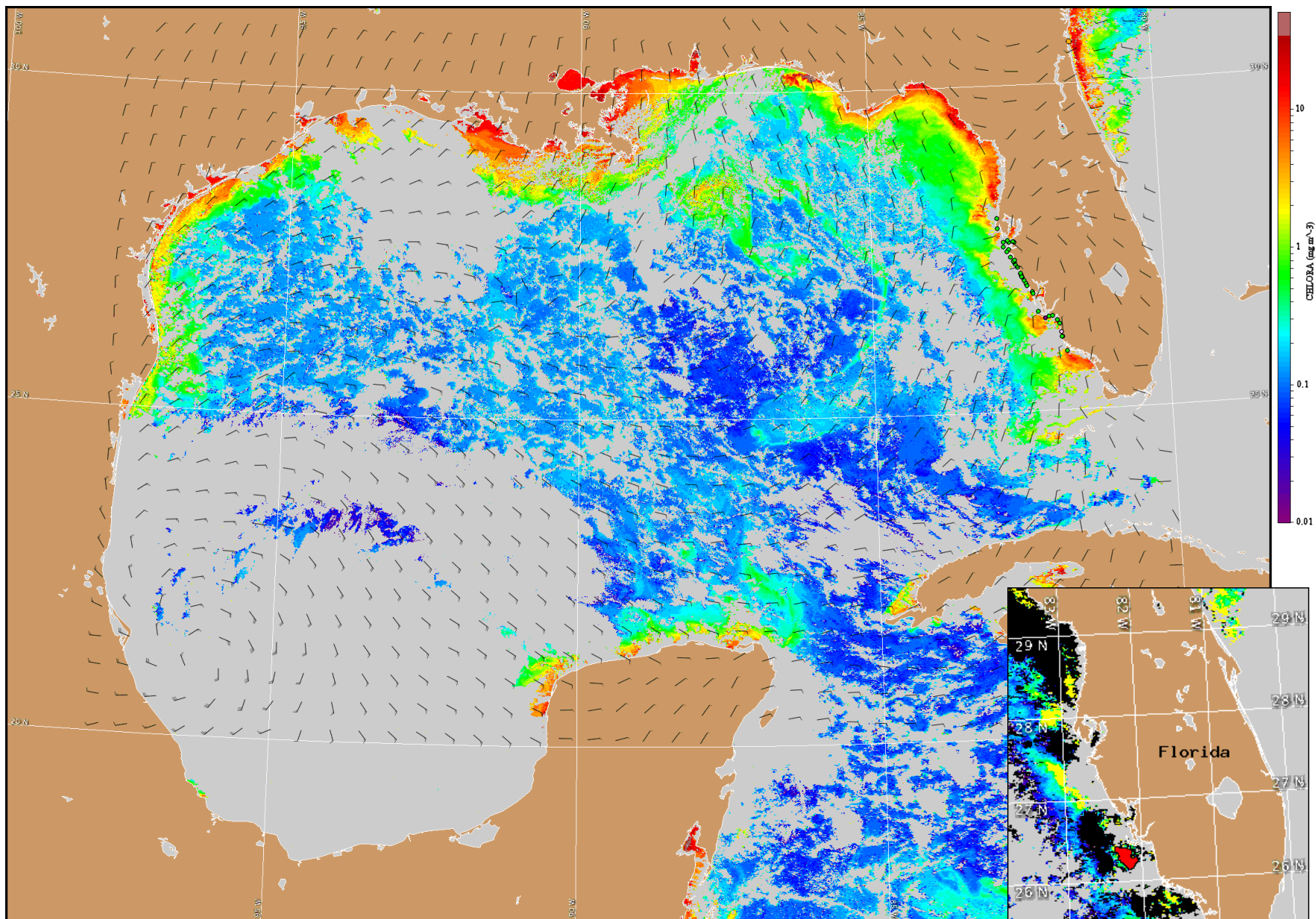
[http://www.csc.noaa.gov/crs/habf/habfs\\_bulletin\\_guide.pdf](http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf)



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.

**E. Florida:** Northeasterly winds at 10 knots (5 m/s) becoming northwesterly Friday. Northeasterly winds at 15-20 knots Friday night through Sunday, and 20-25 knots (10-13 m/s) Sunday night through Monday.

**SW Florida:** Northerly winds today at 5-10 knots (3-5 m/s) and tomorrow becoming northeasterly and increasing to 15-20 knots (8-10 m/s) by Monday.



Satellite chlorophyll image and forecast winds for September 28, 2007 12Z with Cell concentration sampling data from September 17 to 27 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://www.csc.noaa.gov/crs/habfs/habfs\\_bulletin\\_guide.pdf](http://www.csc.noaa.gov/crs/habfs/habfs_bulletin_guide.pdf)

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Venice Pier, FL

