



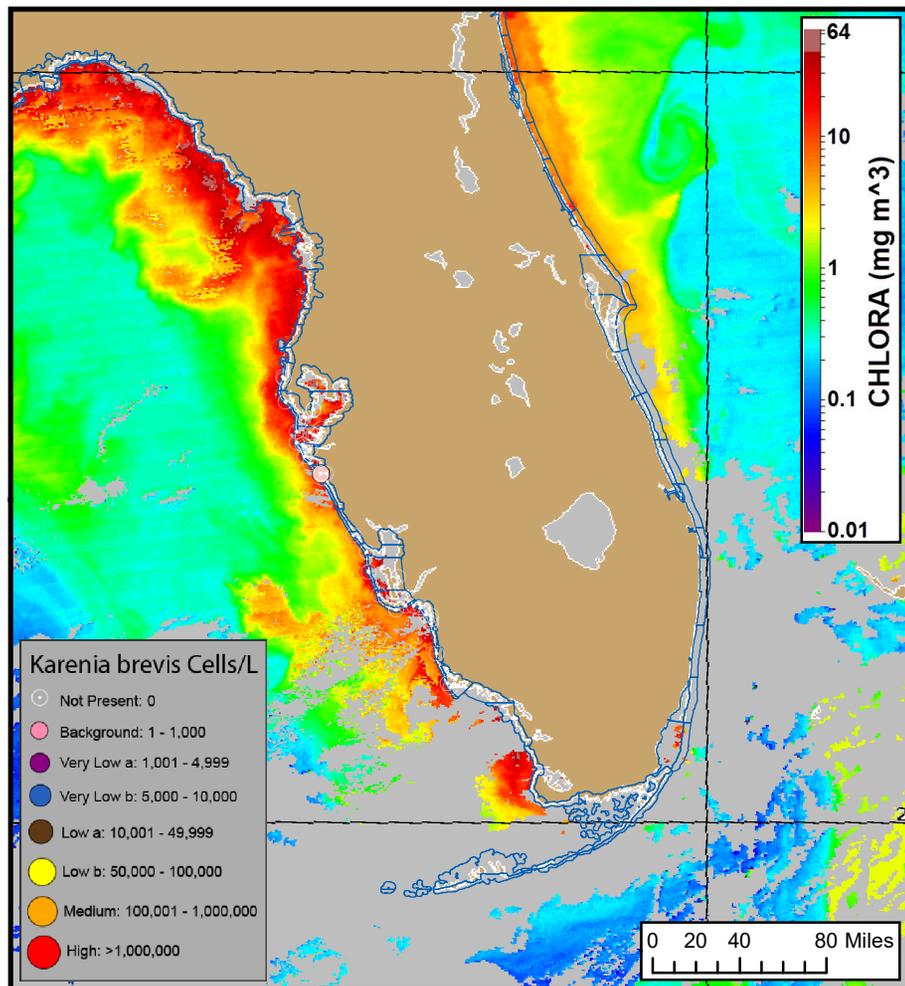
# Gulf of Mexico Harmful Algal Bloom Bulletin

Monday, September 9, 2019  
NOAA National Ocean Service  
NOAA Satellite and Information Service  
NOAA National Weather Service

Region: Southwest Florida



Instructions for viewing this geospatial pdf are available at: <https://go.usa.gov/xn9g2>.



## Conditions Report

Not present to background concentrations of *Karenia brevis* (commonly known as red tide) are present along- and offshore portions of southwest Florida and are not present in the Florida Keys. No respiratory irritation associated with *Karenia brevis* (commonly known as red tide) is expected in this region.

## Analysis

### Imagery:

In recent ensemble imagery (MODIS Aqua, 9/7), patches of elevated to very high chlorophyll (2 to >20  $\mu\text{g/L}$ ) with some of the optical characteristics of *K. brevis* are visible alongshore southwest Florida.

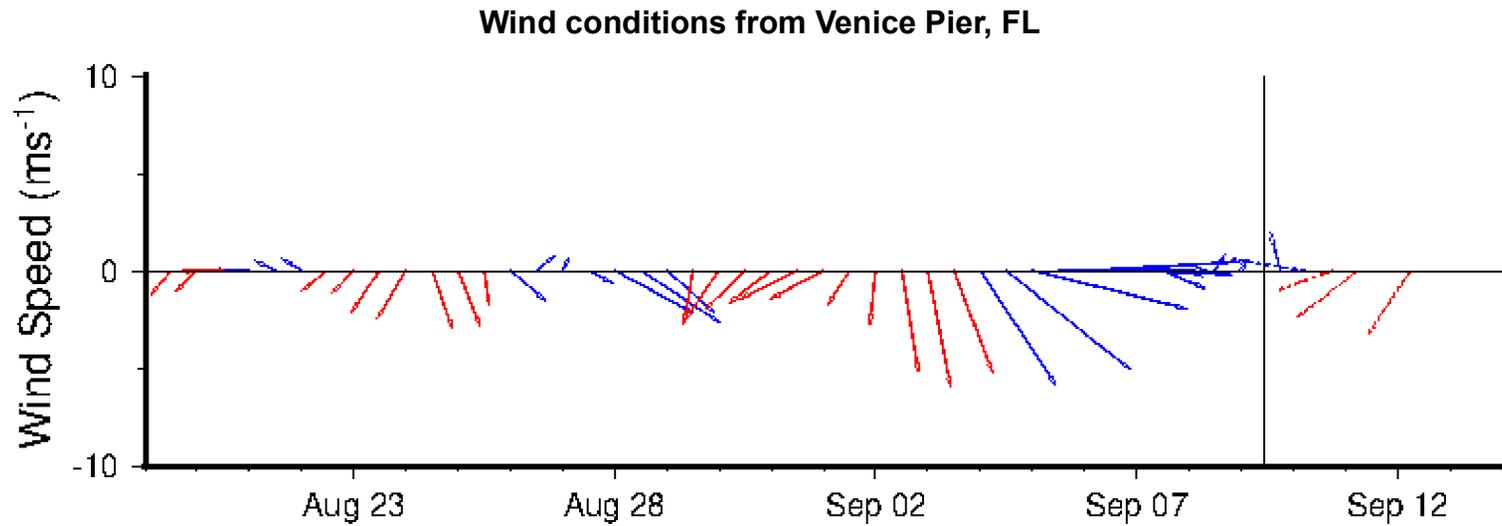
### Forecasts:

Upwelling favorable winds forecast Tuesday through Saturday (9/10-14) will promote the potential for bloom formation at the coast of southwest Florida.

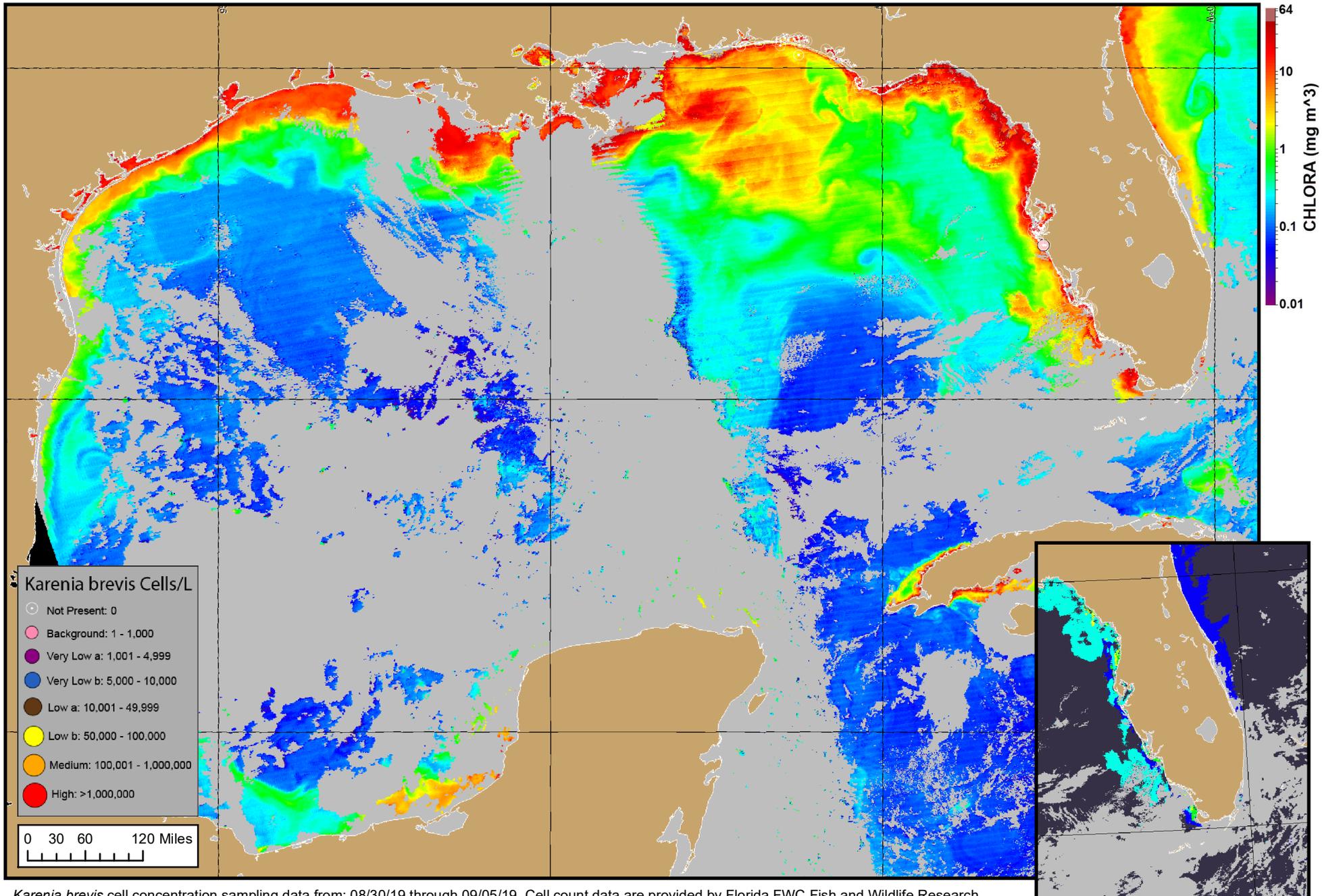
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*Karenia brevis* cell concentration sampling data from: 08/30/19 through 09/05/19. Cell count data are provided by Florida FWC Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: [https://tidesandcurrents.noaa.gov/hab/hab\\_publication/GOMX\\_HAB\\_Bulletin\\_Guide.pdf](https://tidesandcurrents.noaa.gov/hab/hab_publication/GOMX_HAB_Bulletin_Guide.pdf). Detailed sample information can be obtained through the Florida FWC Fish and Wildlife Research Institute: <http://myfwc.com/REDTIDESTATUS>.

MODIS Aqua satellite chlorophyll image (09/07/19) with possible *K. brevis* HAB areas shown by red polygon(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 vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS). A text summary of the marine forecast by region is available from NWS at <https://www.weather.gov/marine/stheastmz>.



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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).