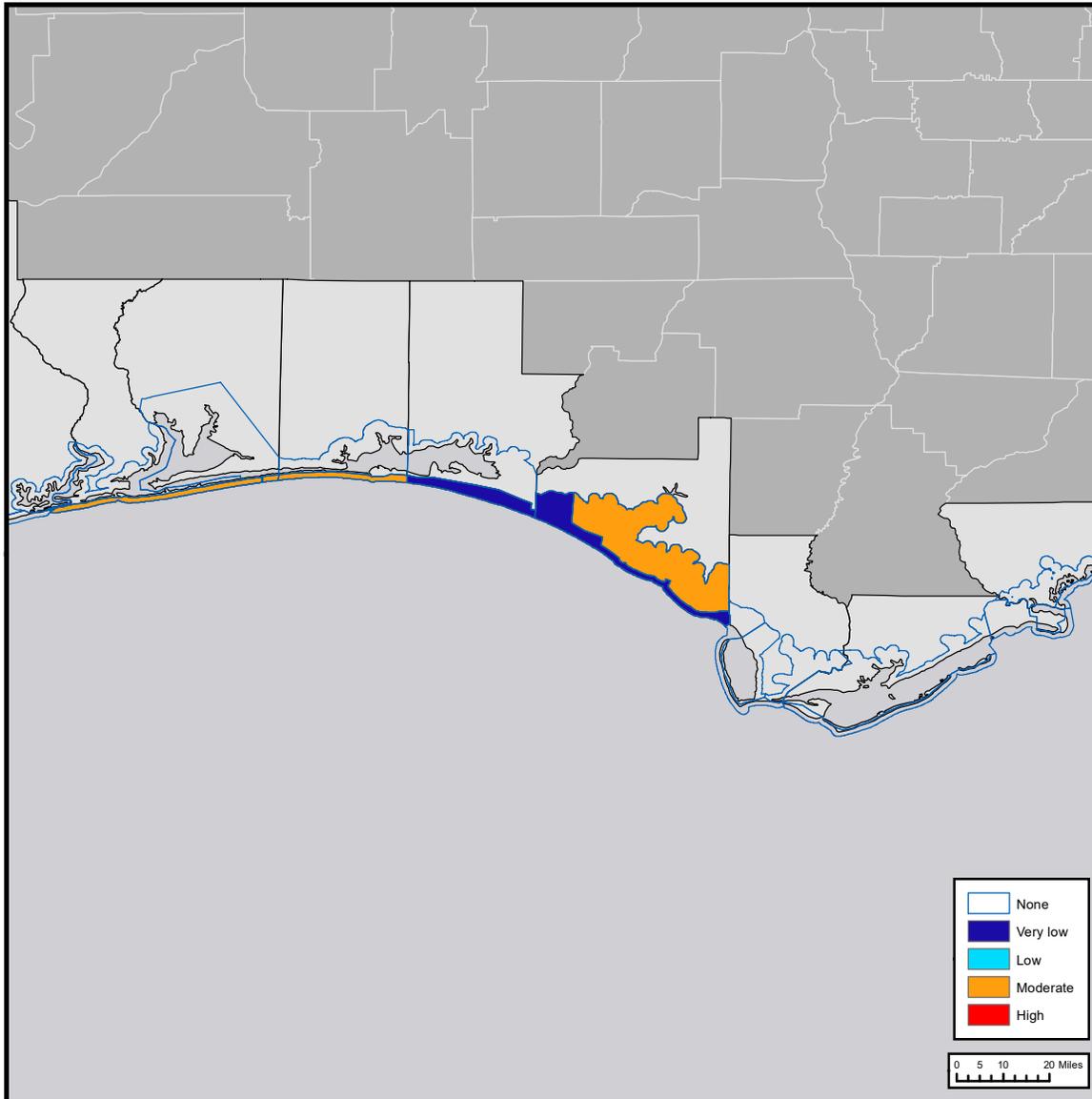




# Gulf of Mexico Harmful Algal Bloom Bulletin

Monday, October 15, 2018  
 NOAA National Ocean Service  
 NOAA Satellite and Information Service  
 NOAA National Weather Service

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



The image above is the top layer in a series of maps for 10-15-18 to 10-18-18 displaying the highest level of potential respiratory irritation forecasts in each region.

## Region: Northwest Florida to Louisiana



### Conditions Report

**\*\*Hurricane Michael has impacted water sampling used to support this forecast. When samples are not available protocol dictates to issue no forecast for that region. However satellite imagery shows the potential for *Karenia brevis* in areas where sampling is not available. This conditions report will be updated when new samples are available.\*\***

Not present to medium concentrations of *K. brevis* (commonly known as red tide) are present along- and offshore portions of northwest Florida. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction.

#### Recently Reported Impacts (Listed by County):

**Respiratory irritation:** Okaloosa  
**Dead fish:** Okaloosa

#### Definition of respiratory irritation levels.

RESPIRATORY IRRITATION LEVEL	AFFECTED POPULATION				
	NONE	CHRONIC RESPIRATORY CONDITION	SENSITIVE TO RED TIDE	GENERAL PUBLIC (MILD SYMPTOMS)	GENERAL PUBLIC (INTENSE SYMPTOMS)
None	X				
Very low		X			
Low		X	X		
Moderate		X	X	X	
High		X	X	X	X

### Additional Resources

#### Health Information:

**Florida Department of Health:**  
<http://www.floridahealth.gov/environmental-health/aquatic-toxins/red-tide.html>  
**Other resources:** <https://go.usa.gov/xQNWp>

#### Recent, Local Observations and Data:

**Mote Marine Laboratory Daily Beach Conditions:**  
<http://visitbeaches.org>  
**Florida Fish and Wildlife Conservation Commission:**  
<http://myfwc.com/redtidestatus>

State Name	County Region	Mon 10/15	Tue 10/16	Wed 10/17	Thu 10/18			
<b>Louisiana</b>								
	<b>ST. TAMMANY Parish-Gulf Coast</b>							
	<b>ORLEANS Parish-Gulf Coast</b>							
	<b>ST. BERNARD Parish-Gulf Coast</b>							
	<b>PLAQUEMINES Parish-Gulf Coast</b>							
<b>Mississippi</b>								
	<b>HANCOCK County-Gulf Coast</b>							
	<b>HANCOCK County-Bay Regions</b>							
	<b>HARRISON County-Gulf Coast</b>							
	<b>East HARRISON County-Bay Regions</b>							
	<b>West HARRISON County-Bay Regions</b>							
	<b>JACKSON County-Gulf Coast</b>							
<b>Alabama</b>								
	<b>BALDWIN County-Gulf Coast</b>							
	<b>BALDWIN County-Bay Regions</b>							
	<b>MOBILE County-Gulf Coast</b>							

The table lists the highest level of potential respiratory irritation forecast. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction.

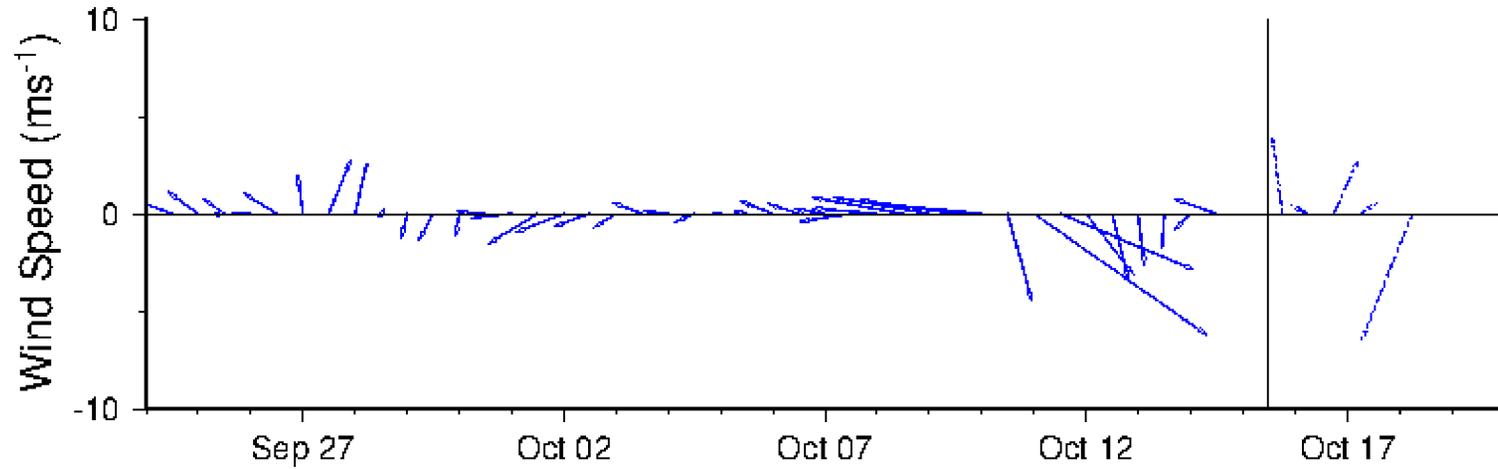
Cells are marked 'none' if *K. brevis* was detected, but no respiratory irritation is forecasted in the region. Cells are blank if no *K. brevis* has been detected in the region.

State Name	County Region	Mon 10/15	Tue 10/16	Wed 10/17	Thu 10/18			
Florida								
	ESCAMBIA County-Gulf Coast	moderate	moderate	low	low			
	ESCAMBIA County-Bay Regions							
	SANTA ROSA County-Gulf Coast	moderate	moderate	low	low			
	SANTA ROSA County-Bay Regions							
	OKALOOSA County-Gulf Coast	moderate	moderate	low	low			
	OKALOOSA County-Bay Regions							
	WALTON County-Gulf Coast	very low	very low	very low	very low			
	WALTON County-Bay Regions							
	BAY County-Gulf Coast	very low	very low	very low	very low			
	BAY County-Bay Regions	moderate	moderate	moderate	moderate			
	GULF County-Gulf Coast							
	GULF County-Bay Regions							
	FRANKLIN County-Gulf Coast							
	FRANKLIN County-Bay Regions							
	WAKULLA County-Gulf Coast							
	WAKULLA County-Bay Regions							
	JEFFERSON County-Gulf Coast							
	TAYLOR County-Gulf Coast							

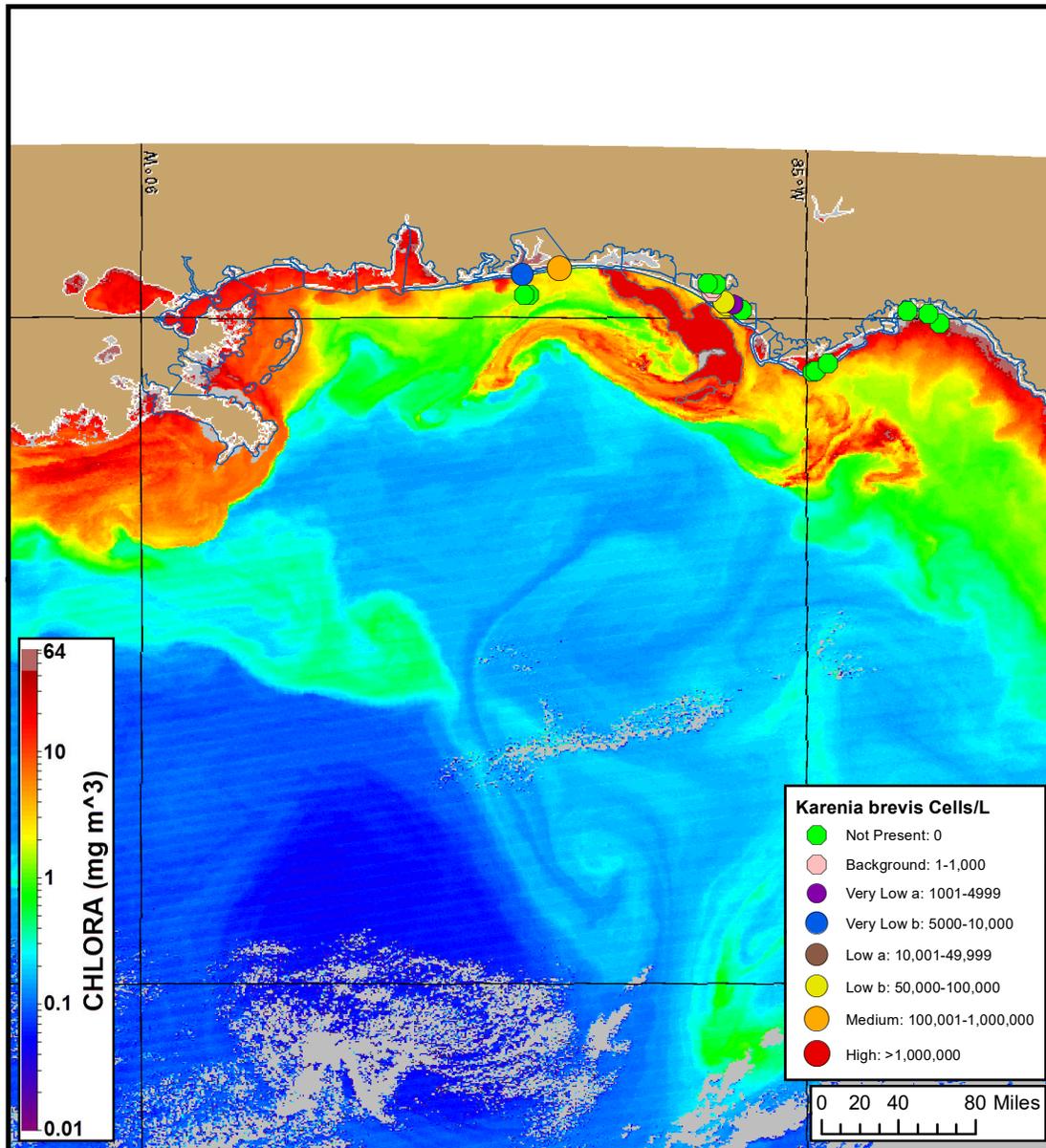
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Cells are marked 'none' if *K. brevis* was detected, but no respiratory irritation is forecasted in the region. Cells are blank if no *K. brevis* has been detected in the region.

### Wind conditions from Panama City Beach, FL



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). A text summary of the marine forecast by region is available from NWS at <https://go.usa.gov/xnx4X>.



*Karenia brevis* cell concentration sampling data from: 10/05/18 through 10/11/18. 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 (10/13/18) with possible *K. brevis* HAB areas shown by red polygon(s).

## Analysis

### Summary of Recent Water Samples:

#### ***K. brevis* Cell Concentrations:**

**Range:** Not Present through Medium

**Date:** 10/05-10/11

**Source:** FWRI, MML

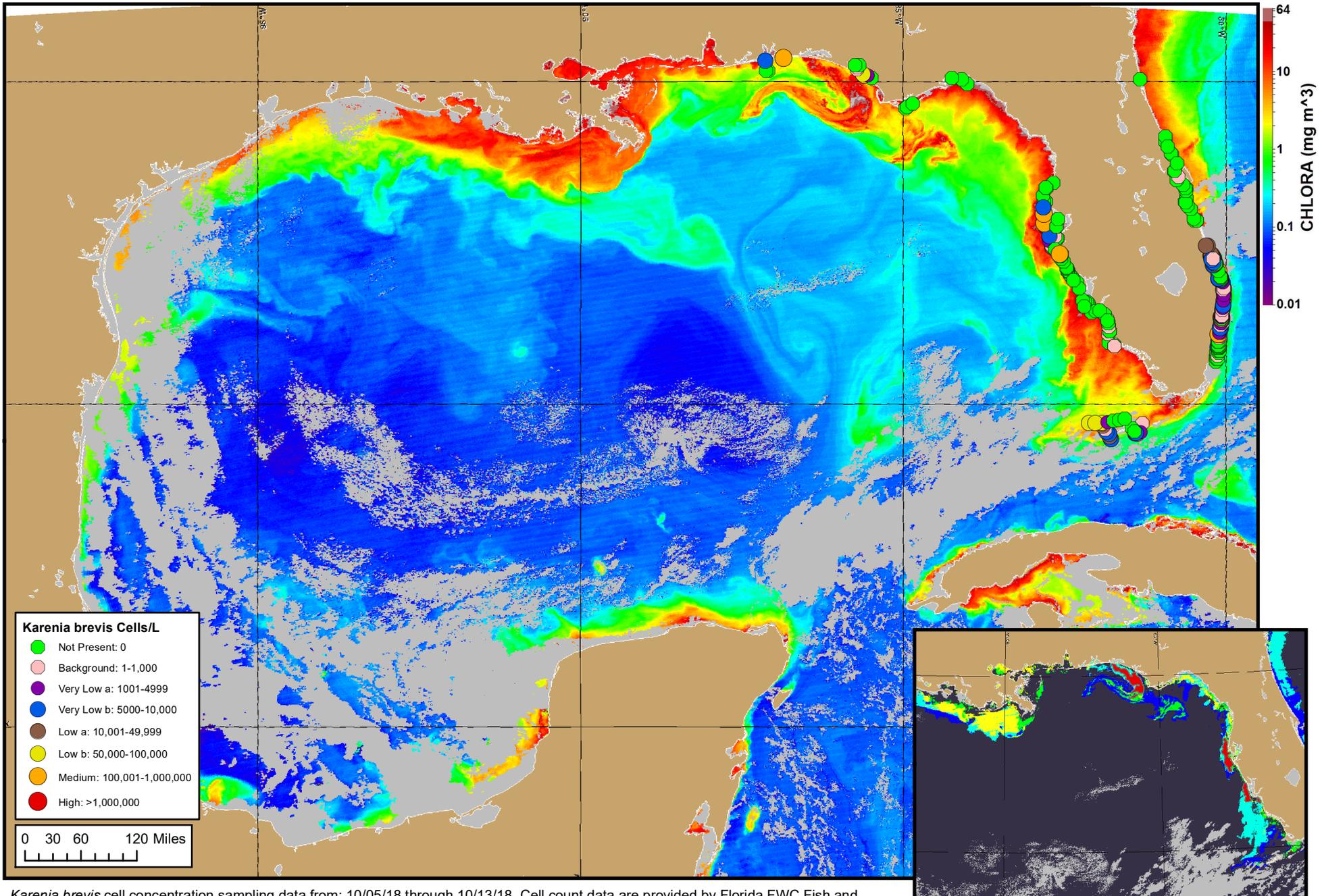
### Imagery:

In recent ensemble imagery (MODIS Aqua, 10/13), patches of elevated to very high chlorophyll (2 to >20 µg/L) with the optical characteristics of *K. brevis* are visible alongshore Escambia to Franklin counties.

### Forecasts:

Offshore winds forecast Wednesday through Thursday (10/17-18) will reduce the potential for respiratory irritation at the coast. Winds forecast Monday through Thursday (10/15-18) will promote the westerly transport of surface *K. brevis* concentrations.

Yang, Ludema



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MODIS Aqua satellite chlorophyll image (10/13/18).