Gulf of Mexico Harmful Algal Bloom Bulletin
Region: Texas
Monday, 15 October 2012
NOAA Ocean Service
NOAA Satellite and Information Service
NOAA National Weather Service
Last bulletin: Tuesday, October 9, 2012

Conditions Report
There is currently no indication of a harmful algal bloom of Karenia brevis (commonly known as Texas red tide) at the coast in Texas. No respiratory impacts are expected alongshore Texas today through Sunday, October 21. For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Analysis
There is currently no indication of a harmful algal bloom of Karenia brevis at the coast in Texas. No new samples have been received from the Port Mansfield or lower Laguna Madre regions, where not present to ‘low a’ concentrations were last identified (TPWD; 9/24-27). These regions will continue to be monitored as samples become available.

In recent MODIS imagery (10/13; shown left), elevated chlorophyll (2-10 µg/L) is visible stretching along- and offshore from Sabine Pass to the Rio Grande. Elevated chlorophyll is not necessarily indicative of the presence of K. brevis and could also be due to the resuspension of benthic chlorophyll and sediments along the coast. In situ sampling is necessary to confirm the presence of K. brevis.

Forecast models based on predicted near-surface currents indicate negligible transport (<10 km) from the Port Aransas region from October 13-18.

Yang, Kavanaugh

Wind conditions from Port Aransas-Coast, TX

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).

Wind Analysis
Port Aransas: Northeast to east winds (5-10kn, 3-5m/s) today through tonight. Southeast to south winds (10-20 kn, 5-10m/s) Tuesday through Thursday becoming northeast winds (15-20kn, 8-10m/s) Thursday afternoon through Friday. East winds (10-15kn, 5-8m/s) Friday afternoon. Southeast winds (5-10kn) Friday night.
Satellite chlorophyll image and forecast winds for October 16, 2012 06Z with cell concentration sampling data from October 6 to 11 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 HAB-OFS bulletin guide:
http://tidesandcurrents.noaa.gov/hab/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).