Conditions Report
Harmful algae are present in the Port Aransas/Corpus Christi Bay area, with patchy very low impacts possible in the area today through Wednesday. Water samples last identified a patchy harmful algal bloom in the Galveston Bay region on January 23. Associated respiratory impacts remain possible in this area. No additional impacts are expected at the coast in Texas today through Wednesday, February 8. The Texas Department of State Health Services (DSHS) continues to monitor blooms of the harmful algae Karenia brevis (red tide) and will open areas to harvesting when safe. The conditionally approved areas 1, 2 and 3 of Lavaca Bay and Espiritu Santo Bay are currently open to commercial oyster harvesting. For the latest information on the opening and closing of oyster harvest areas, please call DSHS at 1-800-685-0361.

Analysis
A harmful algal bloom continues in patches in the Galveston Bay area and harmful algae remains in the Port Aransas/Corpus Christi Bay area; however, samples and satellite imagery indicate that Karenia brevis concentrations are dissipating.

No new samples have been received from either the Galveston Bay or Aransas/Corpus Christi Bay regions. The most recent sampling efforts identified 'not present' to 'low a' K. brevis concentrations from the Galveston Bay area (1/23) and 'not present' to 'very low a' concentrations from the Copano, Aransas, and Corpus Christi bay areas (1/27-30; TPWD).

Over the past few days, MODIS imagery (2/4; shown left) has been obscured by clouds along the Texas coastline from Sabine Pass to the Rio Grande area, limiting analysis. Patches of elevated to high chlorophyll (2 to >10 µg/L), visible stretching along- and offshore the coast from South Padre Island to south of the Rio Grande, are not indicative of the presence of K. brevis; they are most likely artifacts of clouds in the imagery and the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a maximum bloom transport from coastal sample locations of >150km south from the Galveston Bay region and 90km south from the Port Aransas region. Forecasted onshore winds will increase the potential for impacts along the Texas coast today through Wednesday.

Kavanaugh, Derner
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 winds (5-25 kn, 3-13 m/s) today through Wednesday.

**Galveston/Freeport**: North winds (10-15 kn, 5-8 m/s) today becoming northeast winds (5-20 kn, 3-10 m/s) tonight through Wednesday.
Satellite chlorophyll image and forecast winds for February 7, 2012 12Z with cell concentration sampling data from January 27 to February 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 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).