A harmful algal bloom of Karenia brevis is present along the Texas coast, in the Galveston region. In the Galveston area, patchy moderate impacts are possible today through Sunday. No additional impacts are expected at the coast in Texas today through Sunday, August 26. For information on area shellfish restrictions, contact the Texas Department of State Health Services.

**Analysis**

A harmful algal bloom of *Karenia brevis* is present at various locations within Galveston Bay. The most recent samples continue to confirm 'very low b' to 'low b' concentrations of *K. brevis* at Houston Ship Channel (HSC) markers 16, 25, 47 and 55, the east end of the seawall, and the base of the south jetty/Bolivar Roads Pass (8/20; TPWD). While 'low a’ *K. brevis* concentrations continue to be reported at most of the above locations, concentrations at HSC marker 47 increased from 'low a’ to 'low b’, while those at HSC marker 35 decreased from 'low a’ to 'very low b’. *K. brevis* concentrations at the end of south jetty (channel side)/Bolivar Roads Pass also decreased from 'low b’ to 'not present’ in sampling from 8/16 to 8/20 (TPWD). Sampling within East Bay at the tide gauge marker south of Hannah’s Reef continues to indicate that *K. brevis* is not present (8/13-20; TPWD). No recent reports of dead fish, discolored water, or respiratory irritation have been received from the Galveston region (8/22; TPWD).

There have been no reports of *K. brevis* elsewhere along the Texas coast. Recent samples collected alongshore Padre Island National Seashore indicate that *K. brevis* is not present (8/21; TPWD). Overflights conducted on 8/16 revealed no visible red tide or dead fish from the Bolivar Peninsula to the Rio Grande, including the Gulf beaches and all major and minor bays; however, the Texas coastline will continue to be monitored regularly for *K. brevis* (8/16; TPWD).

Recent MODIS imagery (8/21; shown left) is partially obscured by clouds along- and offshore from San Luis Pass south to the Rio Grande, limiting analysis of the Texas coastline. Elevated to high chlorophyll (3-17 µg/L) is visible stretching along- and offshore from Sabine Pass to Galveston Island, including a patch of high chlorophyll (10-17 µg/L) stretching offshore from the mouth of Bolivar Roads Pass, where 'low' concentrations of *K. brevis* have been recently identified (8/13-20; TPWD, TDSHS). 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 a maximum bloom transport from coastal sample locations of 40 km south from the Galveston region and a potential transport of 15 km south from the Port Aransas region from August 20-26.

Derner, Davis

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Wind Analysis

**Port Aransas:** East winds (5kn, 3m/s) today becoming southeast (10-20kn, 5-10m/s) this afternoon through tonight. South winds (10-15kn, 5-8m/s) Friday becoming southeast (10-20kn) Friday afternoon through Sunday.

**Galveston:** Southeast winds (5-15kn, 3-8m/s) today. South winds (10-20kn) Friday and Saturday becoming southeast (10-15kn) Saturday night through Sunday. East winds (5-10kn, 3-5m/s) Sunday night.
Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).