Gulf of Mexico Harmful Algal Bloom Bulletin
11 July 2005
National Ocean Service
National Environmental Satellite, Data, and Information Service
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Conditions: A harmful algal bloom has been identified from northern Pinellas to northern Lee County. Patchy very low to high impacts possible in Pinellas and northern Sarasota Counties every afternoon through Thursday. Patchy very low to moderate impacts are possible in southern Hillsborough and Manatee Counties every afternoon through Thursday. Dead fish have been reported in the past few days from central Pinellas to southern Manatee County.

Analysis: Cloudy imagery limits analysis of the previously identified bloom located in northern Pinellas to northern Lee Counties. Imagery shown is from July 7th. Uncloudy section of July 10th imagery has indicated a resuspension event along the coast from Hurricane Dennis. Reports of discolored water are likely. Tropical Storm winds primarily from the east to southeast may have transported the bloom approximately 50-80 km northward according to wind-transport model. Previously identified northward extent was 28°9'N, 82°51'W. Recommend further sampling in Pasco County. Southeast followed by westerly winds will continue to maintain bloom’s location onshore. Reports of respiratory distress are likely due to onshore winds every afternoon. Sampling from July 3-7 indicates two patchy, high *Karenia brevis* counts in Pinellas county and one high count in northern Sarasota (FWRI). Patchy “not present” to medium cell counts were reported from Pinellas to northern Lee Counties, with multiple medium counts found in southern Tampa Bay and Sarasota Bay (FWRI).

Discolored water was reported approximately 10 miles west of Redington Beach and confirmed to be *Trichodesmium* (July 8; FWRI).

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1. These data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
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Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from June 30, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black “X” (not present).

Wind conditions from Cedar Key, FL

Wind speed and direction are averaged over 12 hours from measurements made on buoys. 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.

SW Florida: Along the coast, southeast winds becoming onshore winds in the afternoon, today at 15 knots (8 m/s) decreasing to 10 knots (5 m/s) through Thursday. Tampa Bay winds are more variable with southwest winds this afternoon followed by variable winds Tuesday morning and northwest to northeasterlies in the afternoon and evening (5-10 knots; 3-5 m/s). Morning southeasterlies becoming onshore every afternoon Wednesday through Thursday (5-10 knots; 3-5 m/s).
Chlorophyll concentration from satellite and forecast winds for July 12, 2005 12Z with cell concentration sampling data from June 30, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis)