



Updated August 14, 2006

**Summary:** Based on climate predictions, current conditions, and field observations, the threat for mass coral bleaching within the FKNMS is currently **MODERATE**.

### Weather and Sea Temperatures

Current remote sensing analysis by NOAA's Coral Reef Watch program shows that sea surface temperatures have not increased beyond normal for this time of year, or resulted in accumulated thermal stress for the area. NOAA's recent Coral Bleaching HotSpot Map (Figure 1), which shows current SST's compared to the historically expected SST's for the region, indicates no elevated temperature anomalies developing for the Florida Keys. NOAA's latest Degree Heating Weeks (DHW) map, indicating the accumulation of elevated temperature in an area based on the previous 12 weeks, also shows no accumulated thermal stress for the region (Figure 2). However, NOAA's *in-situ* monitoring stations indicate that sea temperature readings from the Upper and Middle Florida Keys have increased in the past week, and for the Middle Keys are currently exceeding 30°C (Figure 3). In addition, despite breezy conditions earlier in the month, wind speeds have decreased to below 10 mph over the past 4-5 days (Figure 4).

Mote Marine Laboratory will continue to monitor the NOAA HotSpot maps, DHW maps, and *in-situ* sea temperature data from NOAA monitoring stations on a weekly basis for the remainder of the bleaching season.

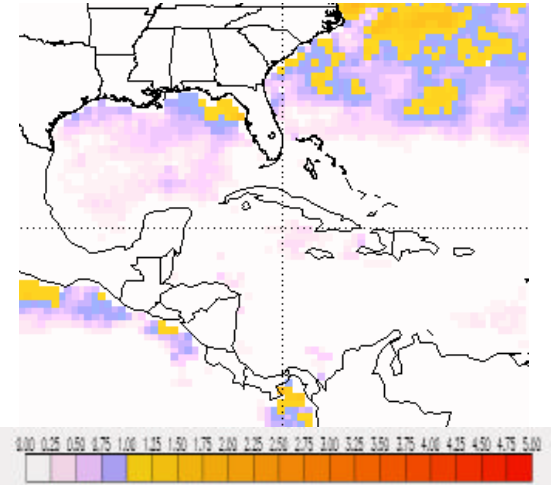


Figure 1. NOAA's Coral Bleaching HotSpot Map for Aug. 12, 2006.  
[www.osdnpd.noaa.gov/PSB/EPS/SST/climohot.html](http://www.osdnpd.noaa.gov/PSB/EPS/SST/climohot.html)

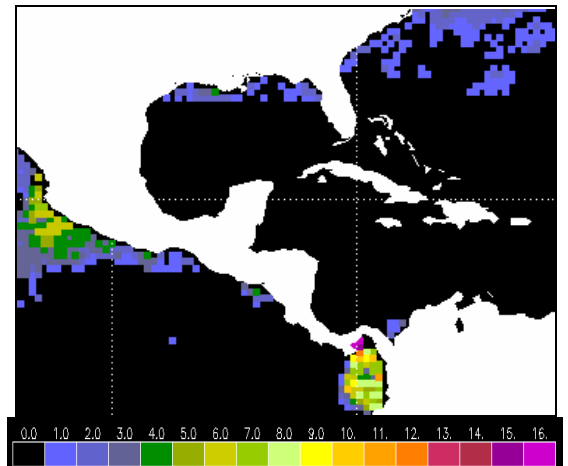


Figure 2. NOAA's Degree Heating Weeks Map for Aug. 12, 2006.

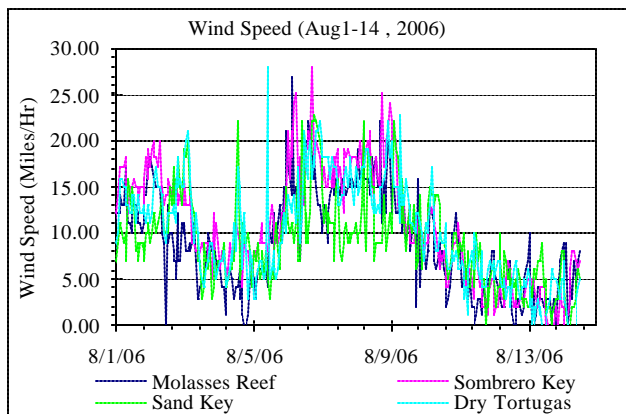


Figure 4. Summary of *in-situ* wind speed data from NOAA/FIO monitoring stations (Aug 1-14, 2006).

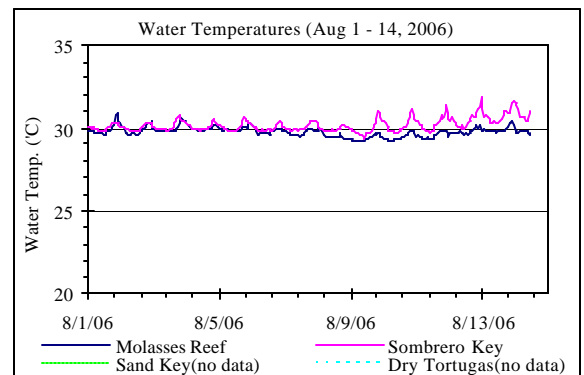


Figure 3. Summary of *in-situ* sea temperature data from NOAA/FIO monitoring stations (Aug. 1-14, 2006).



Mote Marine Laboratory / Florida Keys National Marine Sanctuary  
**Coral Bleaching Early Warning Network**  
**Current Conditions Report #20060814**



**Conditions of Corals**

A total of 17 reports were received during the last report period from throughout the Florida Keys National Marine Sanctuary, with 7 reports indicating signs of isolated paling or partial bleaching colonies (Figure 5). These paling observations were minimal, mostly limited to *Palythoa* sp. (Figure 6), but also included isolated colonies of *Siderastrea* sp., as well as some of the brain corals, *Diploria* sp. and *Colpophyllia natans*.

These isolated observations of paling do not necessarily indicate the onset of a mass bleaching event; however, continued field observations are needed as more widespread bleaching could develop if environmental conditions continue to be favorable.



Photo Rob McCall

Figure 6. *Palythoa* sp. with paling/bleaching on Aug. 12, 2006 at Nine Foot Stake off Key West.

**BleachWatch Reports for August 1-12, 2006**

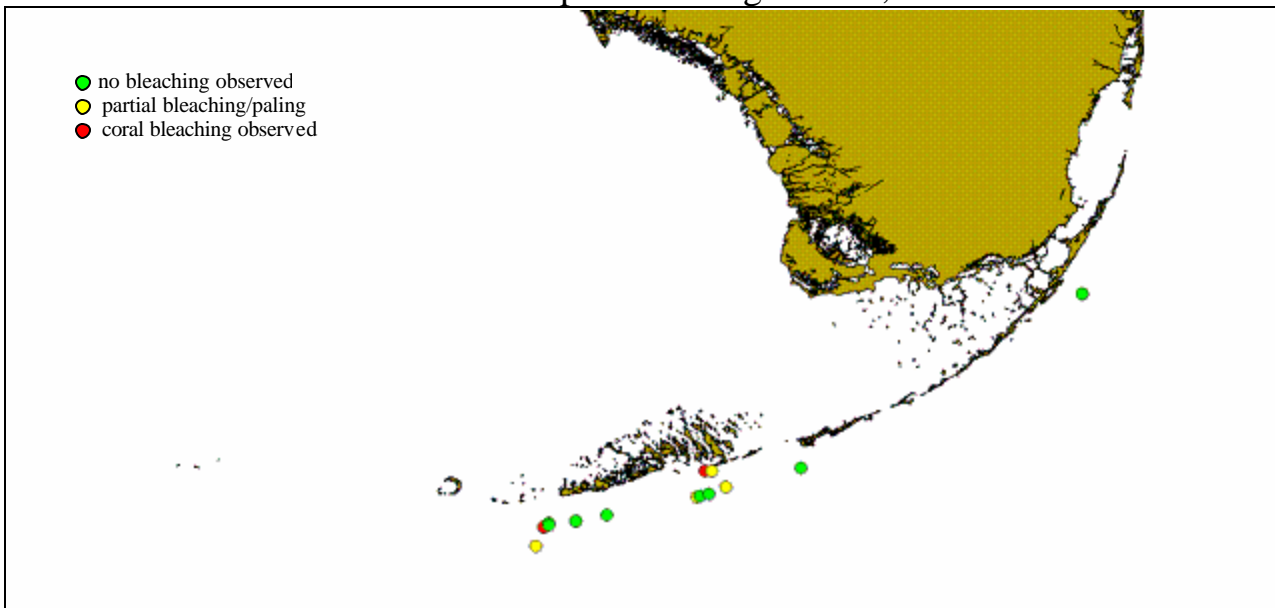


Figure 5. Overview of BleachWatch observer reports submitted from Aug 1-12, 2006.

For more information on the BleachWatch observer program, or to submit a bleaching observation, contact:

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<http://www.mote.org/Keys/research/bleaching.phtml>