



Updated June 30, 2008

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

Weather and Sea Temperatures

Current remote sensing analysis by NOAA's Coral Reef Watch program shows temperatures continuing to remain at a low-level thermal stress in the Florida Keys region. NOAA's recent Coral Bleaching HotSpot Map (Figure 1), which provides current SST's compared to the historically expected SST's for the region, indicates no elevated temperature anomalies for the Florida Keys National Marine Sanctuary and surrounding waters. Similarly, NOAA's latest Degree Heating Weeks (DHW) map, which illustrates the accumulation of elevated temperature in an area based on the previous 12 weeks, indicates temperature stress has not yet begun in the Florida Keys region (Figure 2). NOAA's Integrated Coral Observing Network (ICON) monitoring stations indicate that sea temperatures along the outer reef tract throughout the Florida Keys are still near or below 30°C (Figure3). In addition, wind data indicates there have been no significantly prolonged periods of calm winds (< 5 knots) in the past month, further reducing stress typically caused during doldrums. *In-situ* sea temperature data is still not available for the Sand Key region.

Mote Marine Laboratory will continue to monitor the NOAA HotSpot maps, DHW maps, and *in-situ* sea temperature data from NOAA ICON monitoring stations on a weekly basis as long as the potential for bleaching remains elevated.

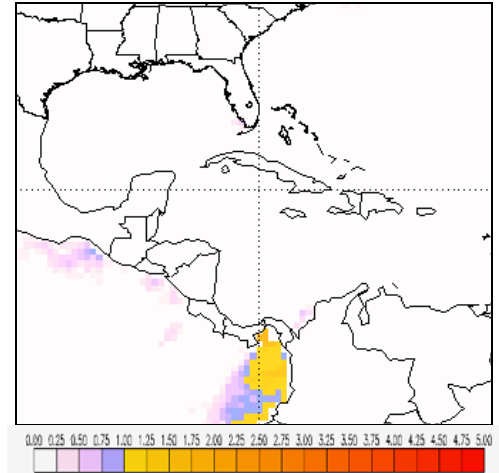


Figure 1. NOAA's Coral Bleaching HotSpot Map for June 30, 2008.

www.osdps.noaa.gov/PSB/EPS/SST/climohot.html

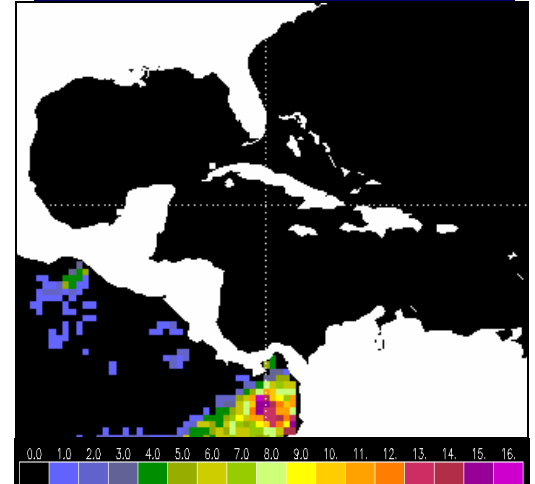


Figure 2. NOAA's Degree Heating Weeks Map for June 30, 2008.

www.osdps.noaa.gov/PSB/EPS/SST/dhw_retro.html

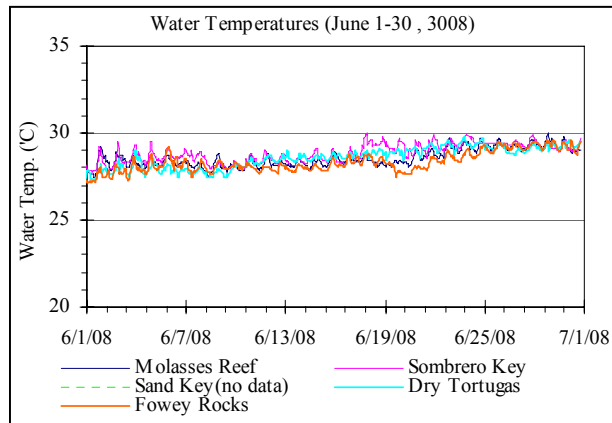


Figure 3. Summary of *in-situ* sea temperature data from NOAA/ICON monitoring stations (June 1-30, 2008).

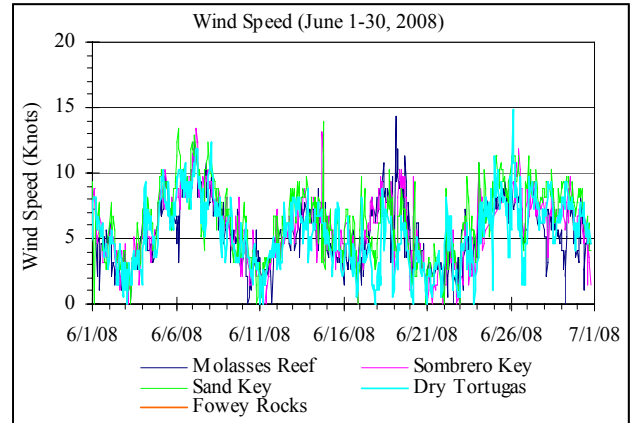


Figure 4. Summary of wind speed data from NOAA/ICON monitoring stations (June 1-30, 2008).



Mote Marine Laboratory / Florida Keys National Marine Sanctuary
Coral Bleaching Early Warning Network
Current Conditions Report #20080630



Conditions of Corals



Photo: Bob Eichholtz

Figure 6. *Montastraea faveolata* showing no signs of coral bleaching, east of NFH 6/21/08.

A total of 36 BleachWatch Observer reports were received during the month of June (Figure 5) throughout the Florida Keys National Sanctuary, with all reports indicating overall observations of no paling or bleaching (Figure 6), however, several reports indicated observations of *Palythoa* spp. (Figure7) with minimal paling.

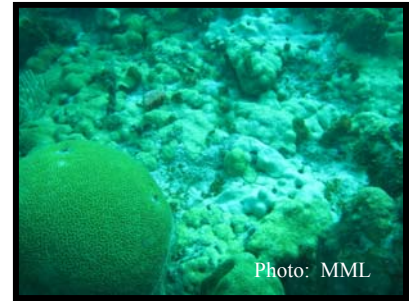


Photo: MML

Figure7. *Palythoa* spp. indicating minimal stress next to a healthy brain coral *Diploria labyrinthiformis* 6/30/08.

Please report after every reef visit, even if no bleaching is observed.

BleachWatch Reports for June 30, 2008

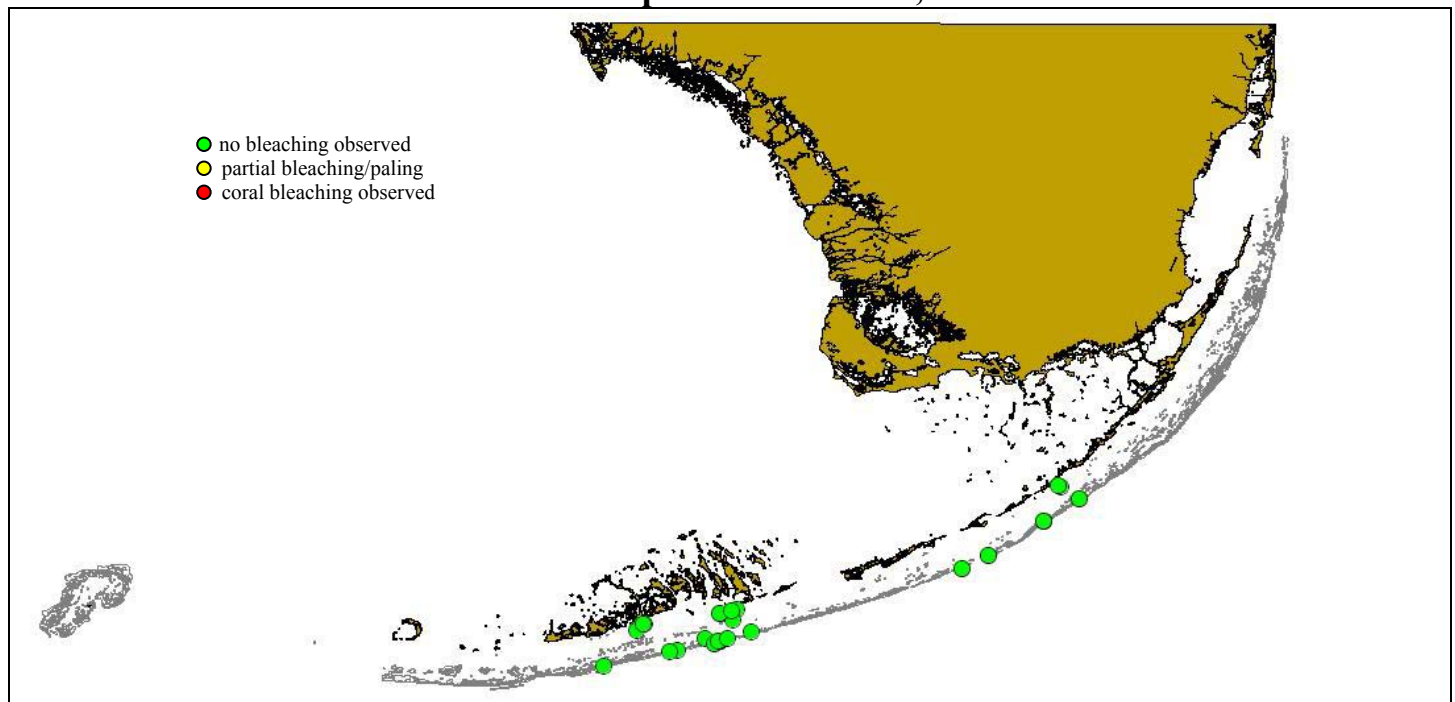


Figure 5. Overview of BleachWatch observer reports submitted from June 1-30, 2008.

Thanks to all of our BleachWatch Observers for your reports!

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

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