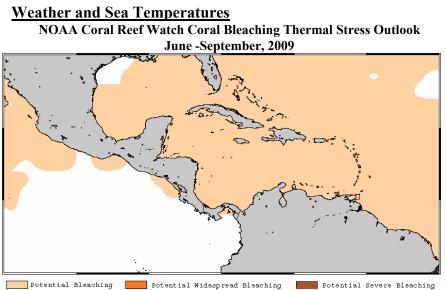


Mote Marine Laboratory / Florida Keys National Marine Sanctuary Coral Bleaching Early Warning Network Current Conditions Report #20090602

Updated June 2, 2009



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

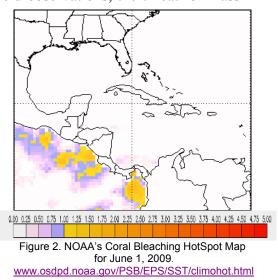


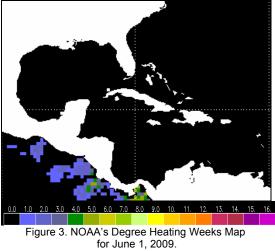
Potential Bleaching Potential Widespread Bleaching Potential Severe Bleaching Figure 1. NOAA's Coral Bleaching Thermal Stress Outlook for June-September 2009. <u>http://coralreefwatch.noaa.gov/satellite/bleachingoutlook/index.html</u>

According to the latest NOAA Coral Reef Watch Coral Bleaching Thermal Stress Outlook, there is potential for coral bleaching throughout the Caribbean, including the Florida Keys region for the remainder of the summer of 2009. (Figure 1).

Current remote sensing analysis by NOAA's Coral Reef Watch program shows that current conditions in the Florida Keys do not indicate signs of building thermal stress. NOAA's recent Coral Bleaching HotSpot Map (Figure2), current SST's compared to the historically expected SST's for the region, shows no current elevated temperature anomalies for the Florida Keys. Similarly, NOAA's latest Degree Heating Weeks (DHW) map, which indicates the accumulation of elevated temperature in an area based on the previous 12 weeks (Figure3), shows no accumulating temperature stress in the Florida Keys region. Observing Network (ICON) NOAA's Integrated Coral monitoring stations indicate that sea temperatures throughout the Florida Keys, at least along the outer reef tract, are still currently below 30°C (Figure4). In-situ sea temperature data is currently not available for Sand Key, Sombrero, or Dry Tortugas regions.

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





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

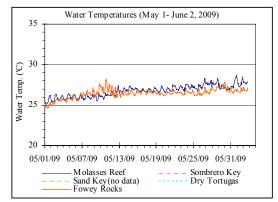


Figure 4. Summary of *in-situ* sea temperature data from NOAA/ICON monitoring stations (May 1- June 2, 2009).



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Conditions of Corals



There are 3 training sessions planned for the end of June and beginning of July, 2009 for anyone interested in participating as an observer with the BleachWatch Program. Please pass this information on to others who might be interested. If you have attended a training session in previous years, it is not necessary to attend again unless you need a refresher.

Key Largo Library Mile Marker 101.4 Tradewinds Shopping Center (Oceanside) Tuesday, June 30th, 2009 6:30 p.m.

Nancy Foster Eco-Discovery Center, Key West 33 East Quay Road Wednesday, July 1, 2009 7:00 p.m.

> Marathon Library 3251 Overseas Highway (Oceanside) Tuesday, July 7, 2009 6:30 p.m.

Additional training sessions will be scheduled to accommodate other interested groups, organizations, or individuals. For information on joining the BleachWatch program, or to organize a training session for your group or organization, please contact the number below.

Frequent coral condition observations from throughout the Florida Keys are needed for the remainder of the summer season. **Please be sure to submit your observations after every visit to the reef, even if no bleaching was observed.** To submit an observation on coral condition, or for more information on the Florida Keys BleachWatch program, please go to <u>http://www.mote.org/Keys/bleaching.phtml</u>, or contact:

Cory Walter Mote Marine Laboratory (305) 745-2729 x301 <u>cwalter@mote.org</u> http://www.mote.org/Keys/bleaching.phtml

