



Mote Marine Laboratory / Florida Keys National Marine Sanctuary
Coral Bleaching Early Warning Network
Current Conditions Report #20170601



Updated June 1, 2017

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

NOAA Coral Reef Watch Current and 60% Probability Coral Bleaching Alert Outlook May 31, 2017 (experimental)

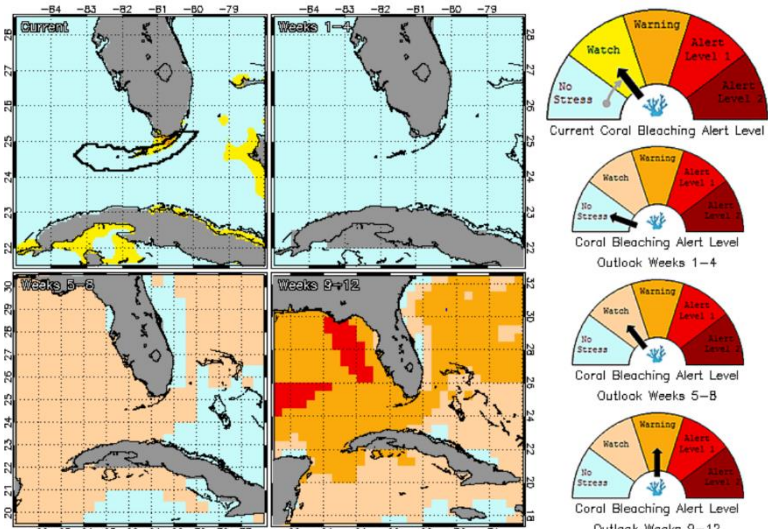


Figure 1. NOAA's 5 km Experimental Current and 60% Probability Coral Bleaching Alert Outlook Areas through August 2017. Updated May 31, 2017.
http://coralreefwatch.noaa.gov/vs/gauges/florida_keys.php

Weather and Sea Temperatures

According to the newly released NOAA Coral Reef Watch (CRW) experimental 5 kilometer (km) Satellite Current and 60% Probability Coral Bleaching Alert Area, there is currently a bleaching watch for some areas of the Florida Keys National Marine Sanctuary, with the potential for more bleaching watches, warnings and alerts if sea temperatures continue to increase in the next few months (Fig. 1).

Recent remote sensing analysis by NOAA's CRW program indicates that most of the Florida Keys region is currently experiencing minimal thermal stress. NOAA's new experimental 5 km Coral Bleaching HotSpot Map (Fig. 2), which illustrates current sea surface temperatures compared to the average temperature for the warmest month, shows temperatures are slightly elevated for the Florida Keys. Similarly, NOAA's experimental 5 km Degree Heating Weeks (DHW) map, which illustrates how much heat stress has built up over the past 12 weeks (Fig.3), indicates minimal accumulating temperature stress currently evident in the Florida Keys region. NOAA's Integrated Coral Observing Network (ICON) monitoring stations, which provide near real time *in-situ* sea temperature data along the outer reef tract throughout the Florida Keys, confirm that temperatures are steadily increasing but are still below 30°C over the past four weeks (Fig.4), likely due in part to slightly breezy conditions observed during this time frame (Fig. 5) *In-situ* sea temperature data is currently only available at Molasses Reef and Fowey Rocks. Sombbrero is not recording any data at this time. 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.

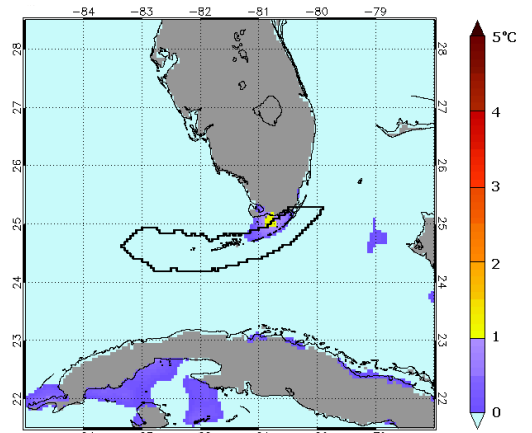


Figure 2. NOAA's Experimental 5km Coral Bleaching HotSpot Map for Florida May 31, 2017.
<http://coralreefwatch.noaa.gov/regions/florida.php>

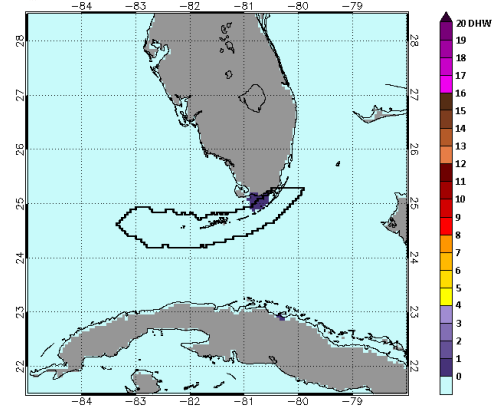


Figure 3. NOAA's Experimental 5km Degree Heating Weeks Map for Florida May 31, 2017.
<http://coralreefwatch.noaa.gov/regions/florida.php>

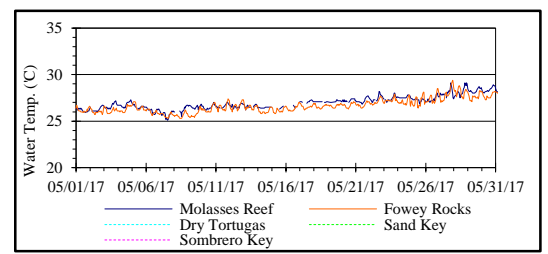


Figure 4. *in-situ* sea temperature from NOAA/ICON monitoring stations (May 1-31, 2017).

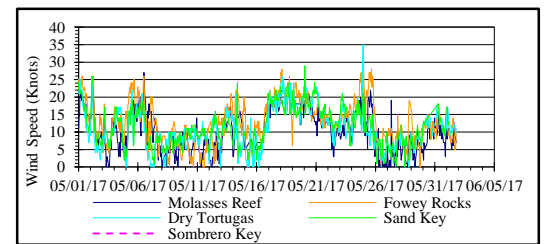


Figure 5. Wind speed data from NOAA/ICON monitoring stations (May 1-31, 2017).



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Current Coral Conditions

BleachWatch observers are encouraged to start submitting your observations after every visit to the reef, **even if NO bleaching was observed.** Frequent coral conditions observations from throughout the Florida Keys are needed for the remainder of the summer season. To submit an observation on coral condition, or for more information on the Florida Keys BleachWatch program, please go to www.mote.org/bleachwatch



For information on joining the BleachWatch program, or to organize a training session for your group or organization, please contact the number below.

There are currently 2 training sessions planned for June 2017 for anyone interested in participating as an observer with the BleachWatch Program and to check out the new building. Please pass this information on to others who might be interested and have them RSVP. If you have attended a training session in previous years, it is not necessary to attend again unless you need a refresher.



Mote Marine Laboratory
 24244 Overseas Hwy (Oceanside)
 Summerland Key, FL
 Saturday, June 17th, 2017
 10:00 a.m.



Mote Marine Laboratory
 24244 Overseas Hwy (Oceanside)
 Summerland Key, FL
 June 20th, 2017
 6:30 p.m.

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

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 24244 Overseas Highway
 Summerland Key, FL 33042
 (305) 395-8730

<http://www.mote.org/bleachwatch>

Funding Provided By:

