

Mote Marine Laboratory / Florida Keys National Marine Sanctuary

Coral Bleaching Early Warning Network

Current Conditions Report #20250827



Updated August 27, 2025

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

NOAA Coral Reef Watch Current and 60% Probability Coral Bleaching Alert Outlook August 27, 2025 (experimental)

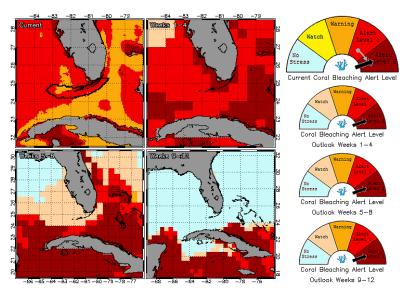


Figure 1. NOAA's 5 km Experimental Current and 60% Probability Coral Bleaching Alert Outlook Areas through November 2025. Updated August 27, 2025. http://coralreefwatch.noaa.gov/vs/gauges/florida_keys.php

Figure 2. NOAA's Experimental 5km Coral Bleaching HotSpot Map for Florida August 27, 2025.

NOAA Coral Reef Watch Website

Figure 3. NOAA's Experimental 5km Degree Heating Weeks Map for Florida August 27, 2025. NOAA Coral Reef Watch Website

Weather and Sea Temperatures

According to the current NOAA Coral Reef Watch (CRW) experimental 5-kilometer (km) Satellite Current and 60% Probability Coral Bleaching Alert Area, most areas of the Florida Keys National Marine Sanctuary are under a "Bleaching Alert Level 2", which means there is a reef-wide risk of bleaching and potential for more bleaching warnings and alerts if sea temperatures continue to be elevated in the next few weeks (Fig. 1).

Recent remote sensing analysis by NOAA's CRW program indicates that all areas of the Florida Keys region are currently experiencing elevated 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 sea surface temperatures are currently elevated above normal in the Florida Keys. Similarly, NOAA's experimental 5 km Degree Heating Weeks (DHW) map (Fig.3), which illustrates how much heat stress has built up over the past 12 weeks, indicates accumulating temperature stress is evident in the Florida Keys region. Florida Keys National Marine Sanctuary (FKNMS) Aqualink, which provides near real time *in-situ* wind data at Mote's Sand Key Coral Nursery, as well as Aqualink *in-situ* temperature data confirm that

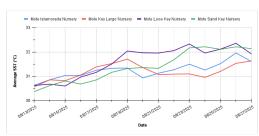


Figure 4. *in-situ* sea temperature from Aqualink monitoring stations (August 13-27, 2025).

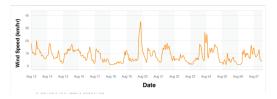


Figure 5. Wind speed data from Aqualink's Sand Key Mote Coral Nursery monitoring station (August 13-27, 2025).

temperatures remain above historical maximums, with all areas above 30°C (Fig.4). Mote Marine Laboratory will continue to monitor the NOAA HotSpot maps, DHW maps, and Aqualink sea temperature data from FKNMS monitoring stations on a weekly basis for the remainder of the bleaching season.



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Current Coral Conditions

A total of 17 BleachWatch observer reports were received between August 13-27 (Fig. 6), with 16 reports indicating colonies exhibiting signs of paling or partial bleaching (Fig. 8). The remaining 1 report indicated no



Figure 7. Paling/partially bleached Orbicella faveolata (OFAV), Davey Crocker Reef

significant signs of coral bleaching were observed. At those sites where paling/bleaching was noted, the overall percentage of corals exhibiting signs of stress was 31-50% and majority of paling/partial bleaching observations consisted of isolated colonies of Mountainous Star Coral (*Orbicella faveolata*) (Fig 7), Tan Lettuce Coral (*Agaricia agaricites*) (Fig. 8), and Great Star Coral (*Monstera cavernosa*). Other observations included paling and bleaching of *encrusting fire coral*, and several reports of coral disease, mainly tissue loss.



Figure 8. Partial Bleaching *Agaricia* agaricites

Continued field observations are needed as widespread coral bleaching could potentially continue to develop if

environmental conditions continue to be averse to coral health. Please remember to report even if there is no bleaching at your site. To submit an observation on coral conditions, or for more information on the Florida Keys BleachWatch program, please go to www.mote.org/bleachwatch.

BleachWatch reports for August 13-27, 2025



Figure 6. Overview of BleachWatch reports from August 13-27, 2025.

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





