



Updated October 29, 2024

**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 October 26th, 2024 (experimental)

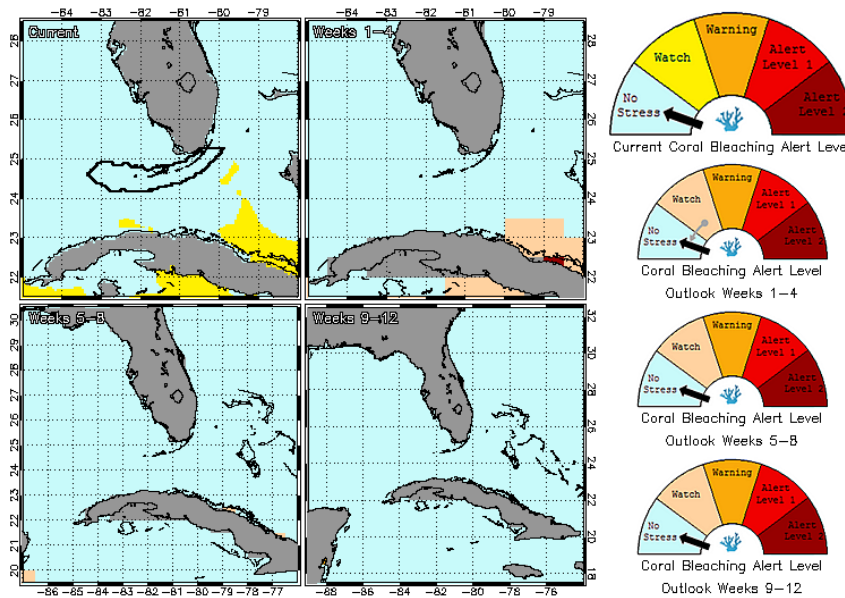


Figure 1. NOAA's 5 km Experimental Current and 60% Probability Coral Bleaching Alert Outlook Areas through December 2024. Updated October 26, 2024.

[https://coralreefwatch.noaa.gov/product/vs/gauges/florida\\_keys.php](https://coralreefwatch.noaa.gov/product/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, areas of the Florida Keys National Marine Sanctuary (FKNMS) has been reduced to “No Stress”, indicating there is no longer a threat of mass bleaching this season for the Florida Keys (Fig. 1).

Recent remote sensing analysis by NOAA's CRW program indicates that all the Florida Keys region continues to experience decreasing 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 that temperatures are currently not 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), confirms that the level of accumulated temperature stress is decreasing for the Florida Keys region.

NOAA's Integrated Coral Observing Network (ICON), which provides near real time *in-situ* wind data at Sand Key, as well as Mote Marine Laboratory (MML), and Pacific Marine Environmental Laboratory (PMEL) *in-situ* temperature data confirm that temperatures have decreased over the past few weeks at or below 30°C (Fig. 4), likely due in part to the recent elevated wind speeds (Fig. 5). Because the CRW's program continues to maintain a coral bleaching alert status of “No Stress” indicating that coral bleaching is not likely, and due to the current environmental conditions, this will be the final current conditions report for the 2024 Florida Keys BleachWatch season.

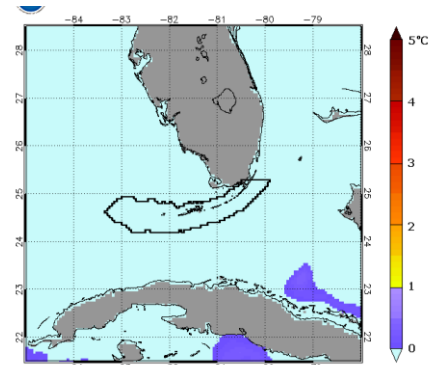


Figure 2. NOAA's Experimental 5km Coral Bleaching HotSpot Map for Florida October 26, 2024.

[NOAA Coral Reef Watch Website](https://coralreefwatch.noaa.gov)

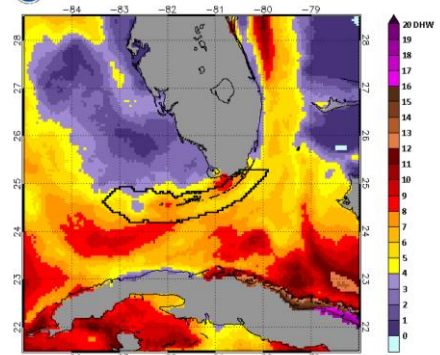


Figure 3. NOAA's Experimental 5km Degree Heating Weeks Map for Florida October 26, 2024.

[NOAA Coral Reef Watch Website](https://coralreefwatch.noaa.gov)

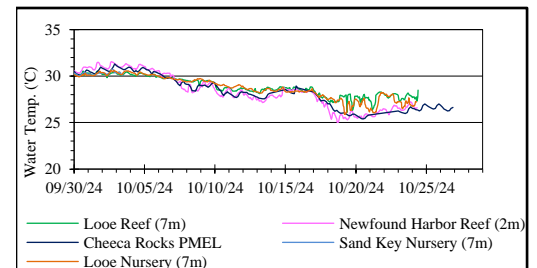


Figure 4. *in-situ* sea temperature from Mote/PMEL monitoring stations (September 30- October 29, 2024).

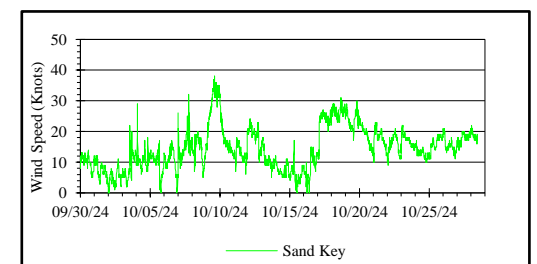


Figure 5. Wind speed data from NOAA/ICON monitoring stations (September 30- October 29, 2024).



# Coral Bleaching Early Warning Network

## Current Conditions Report #20241029



### Current Coral Conditions

A total of 4 BleachWatch Observer reports were received during the last month of October (Fig. 6), with 4 reports indicating isolated colonies exhibiting signs of paling and partial bleaching. In areas where paling/partial bleaching was identified, the overall percentage of corals exhibiting signs of thermal stress was 1-50%. The affected corals mainly included Encrusting/Mound/Boulder, Flower corals, Brain corals, and Branching corals. Other observations included paling of *Palythoa* spp., and Fire Coral, as well as one report of coral disease.

The 2024 Florida Keys BleachWatch season has officially come to an end with a total of 177 reports submitted by BleachWatch observers and researchers (Fig 7). Observer reports verified that moderate signs of coral bleaching were observed in the Florida

Keys region in 2024, with most reports noting only paling or partial bleaching and with up to 75% of corals affected at some of those sites. Based on current environmental conditions significant coral bleaching in the Florida Keys National Marine Sanctuary and surrounding waters seems highly unlikely to continue at this time. As a result, this will be the final current conditions report for 2024.



Figure 6. Overview of BleachWatch observer reports submitted from October 1 – October 29, 2024

### BleachWatch Reports for 2024

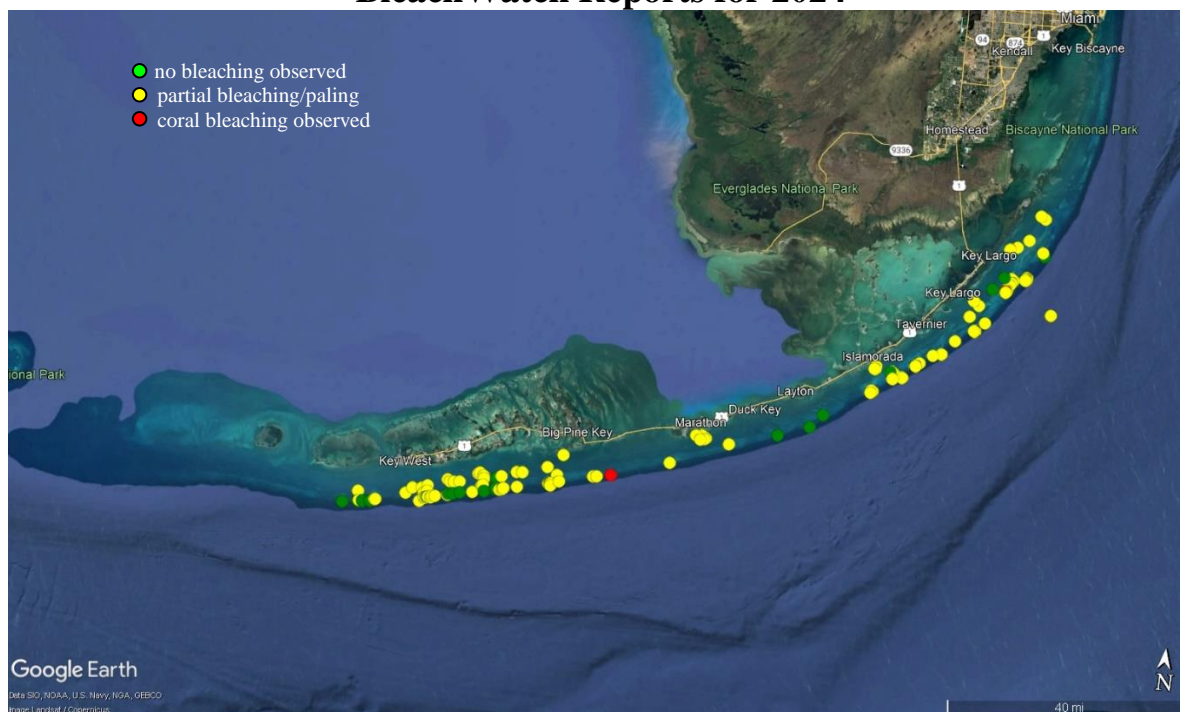


Figure 7. Overview of BleachWatch observer reports submitted during the 2024 coral bleaching season.

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

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



### FUNDING THANKS TO....

