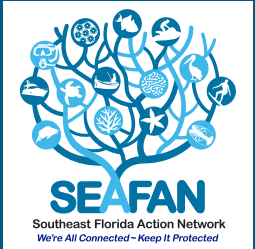




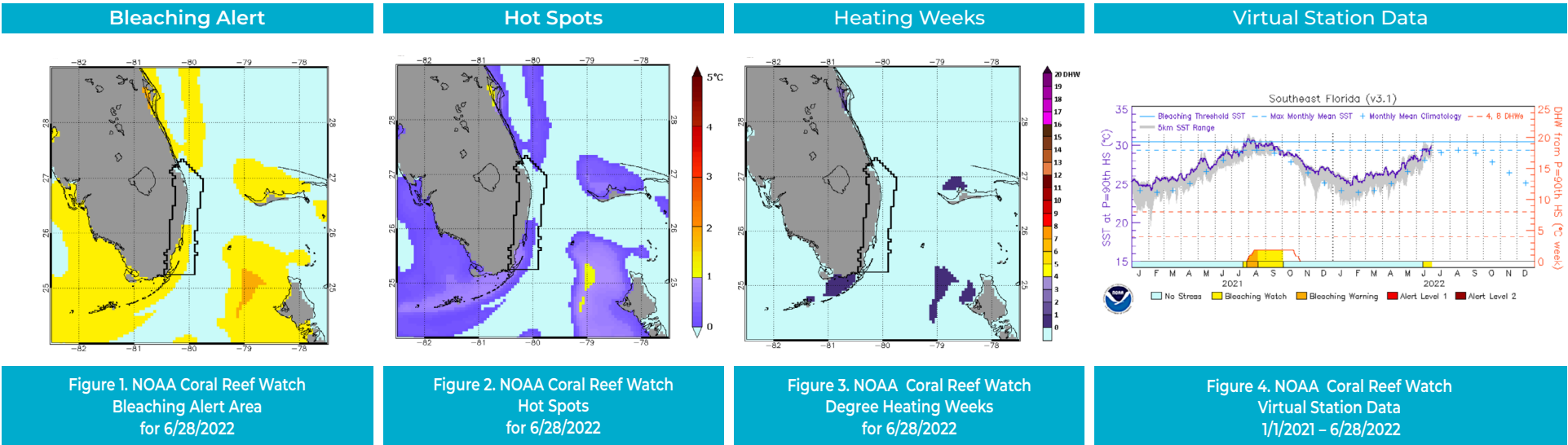
SEAFAN BleachWatch Program

CURRENT CONDITIONS REPORT #20220701

JULY 1, 2022



Summary: Based on climate predictions and field observations, the threat for mass coral bleaching in Southeast Florida between Miami-Dade and Martin counties is low as of June 28, 2022.



ENVIRONMENTAL MONITORING

Climate predictions for this current conditions report are based on the National Oceanic and Atmospheric Administration's Coral Reef Watch (CRW) satellite imagery, which summarizes sea surface temperature (SST) data and provides an indication as to when conditions are favorable for coral bleaching. The current CRW 5K Coral Bleaching Alert Area indicates that the Southeast Florida region is presently experiencing low thermal stress (**Figure 1**).

- NOAA's experimental 5K Bleaching Hot Spot Map (**Figure 2**) compares current SST to the maximum monthly mean. Corals start to become stressed when SST is 1° C greater than the highest monthly average. Currently, SST remains below that 1° C threshold.
- Coral bleaching risk increases if the temperature stays elevated for an extended period of time. NOAA's experimental 5K Degree Heating Weeks (DHW) Map (**Figure 3**) shows the accumulation of temperature stress over the previous 12 weeks, with 1 DHW equal to one week at 1° C greater than the maximum monthly mean. Currently, this map indicates there is no accumulated temperature stress in the Southeast Florida region.
- Near real-time data from CRW's new 5K Satellite Regional Virtual Station for Southeast Florida indicates that SST in the region is below the maximum monthly average and below the bleaching threshold of the region (**Figure 4**).

SSTs have remained slightly higher than the monthly mean in Southeast Florida but remain below the maximum monthly mean and bleaching threshold. The Southeast Florida Satellite Coral Bleaching Alert Area Outlook for the upcoming four weeks predicts that there will be no stress in the northern counties and a Bleaching Watch in southern Miami-Dade County (**Figure 5A**). The five- to eight-week outlook indicates that Martin County will have no thermal stress while Palm Beach, Broward and Miami-Dade counties are predicted to be under a Bleaching Watch (**Figure 5B**). The nine- to 12-week outlook indicates a Bleaching Watch for Martin and Palm Beach counties while Broward and Miami-Dade counties will elevate to Bleaching Warning (**Figure 5C**).

The Florida Department of Environmental Protection's [Coral Reef Conservation Program](#) will continue to monitor NOAA's Hot Spot, DHW and Alert Area maps as well as Virtual Station data for the remainder of the summer bleaching season.

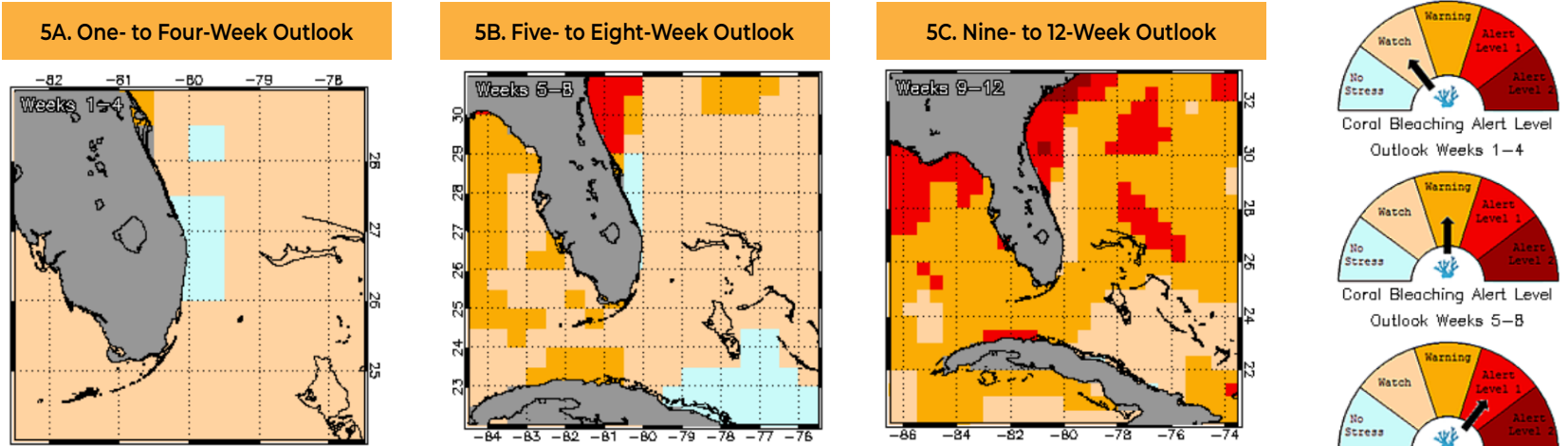


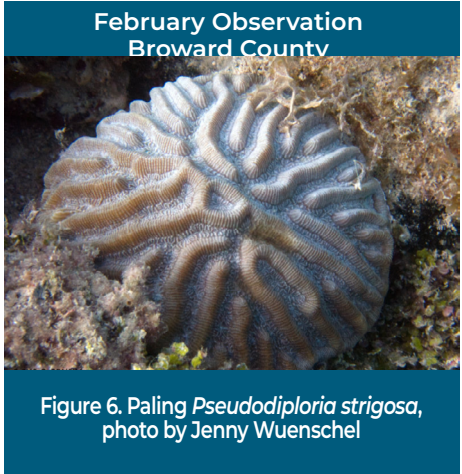
Figure 5. NOAA CRW Southeast Florida Satellite 60% Probability Coral Bleaching Outlook Areas for June 28, 2022, through part of September 2022

OBSERVER NETWORK

The Southeast Florida Action Network (SEAFAN) BleachWatch Program has received two reports of coral bleaching and one report of stony coral tissue loss disease in Southeast Florida since Jan. 1, 2022. Disease also has been observed in *Palythoa spp.*

The next Current Conditions Report will be issued in early August. Given the rising temperatures over the next eight weeks, especially in southern Miami-Dade County, SEAFAN encourages the BleachWatch network to [submit reports](#) on coral bleaching and disease after every dive on the reef. This includes reports of "No Bleaching" and "No Disease."

For more information about [SEAFAN BleachWatch](#) or to take a [BleachWatch Training](#) and become a part of the observer network, please contact the Reef Resilience Coordinator at 561-681-6631 or email Coral@FloridaDEP.gov.



Program Partners