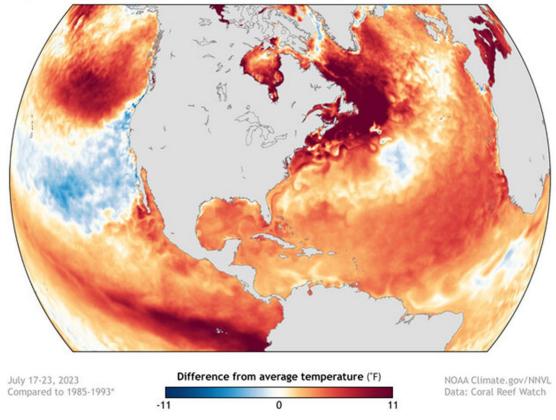


Summer 2023

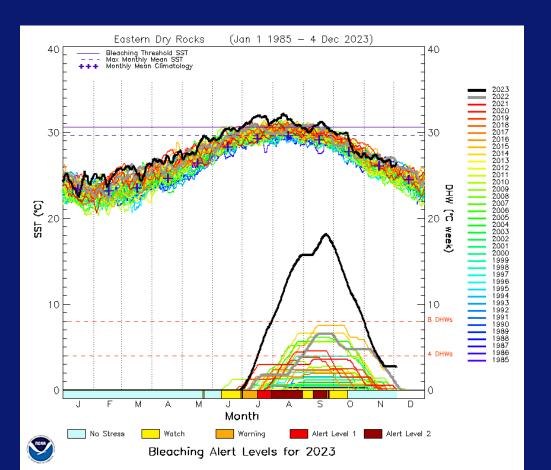
## **MARINE HEAT WAVE**





Much of the global ocean was warmer than average in July 2023. Nearly the entire North Atlantic was warmer than average (red colors) during the week of July 17-23. NOAA Climate.gov image, based on Coral Reef Watch data from NOAA View.

## SEA SURFACE TEMPERATURES AND HEAT STRESS



Heat stress causes

## **CORAL BLEACHING**



**During- and Post-Event** 

## **SYNOPTIC MONITORING**







#### Acroporid Gene Bank Rescue

## **ALL HANDS ON DECK**





Credit: Scott Atwell

Acroporid Gene Bank Rescue

## **ALL HANDS ON DECK**





**Coral Nursery Biomass** 

## **RESCUED TO LAND BASED FACILITIES**





Credit: Scott Atwell

**Nursery Evacuations** 

## ON LAND AND DEEPER

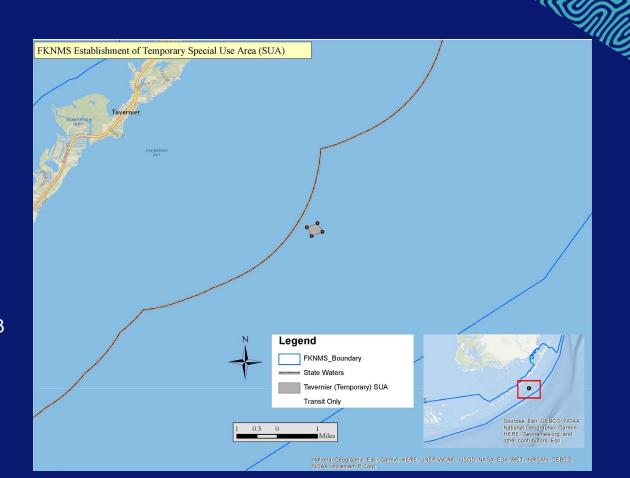




#### **Nursery Protections**

### **EMERGENCY RULE**

- Temporary Special Use Area
- 60 days with potential for one, 60-day extension
- Entry prohibited except for conducting restoration activities under permit
- Continuous transit without interruption allowed
- First emergency rule since 2003



Pilot Testing

# **INTERVENTIONS**







#### Fact-based

### **MEDIA AND OUTREACH**

US Crime + Justice Energy + Environment Extreme Weather Space + Science

Florida ocean temps surge to 100 degrees as mass coral bleaching event is found in some reefs

By Eric Zerkel, CNN
Updated 9:56 AM EDT, Wed July 26, 2023







#### CORAL REEFS

'Not all corals are going to die': Florida Keys nursery moves coral to cooler waters amid high water temps

The relocation is a preventative measure to help protect the corals from hot water temperatures, which can cause coral bleaching.

PBS.ORG

Coral reefs off coast of Florida bleached as water temperatures top 100 degrees Fahrenheit

Human Dimensions of the Heat Stress

## **SURVEY OF RECREATIONAL USERS**





The latest edition of the Florida Climate Resilience Survey found that 90% of respondents believe climate change is happening

#### Additional Funding and Capacity

## THE WORK WILL CONTINUE



## **CORALS ARE RECOVERING**

July 30



Aug 18

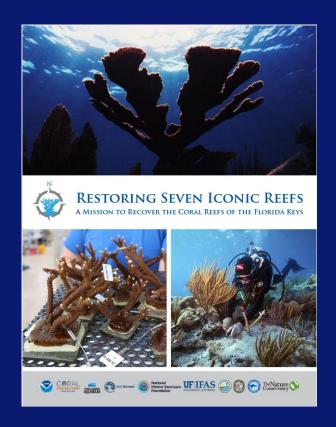


Sept 20



Andrew Ibarra

## **LEARNING AND ADAPTING**







Sarah.Fangman@noaa.gov