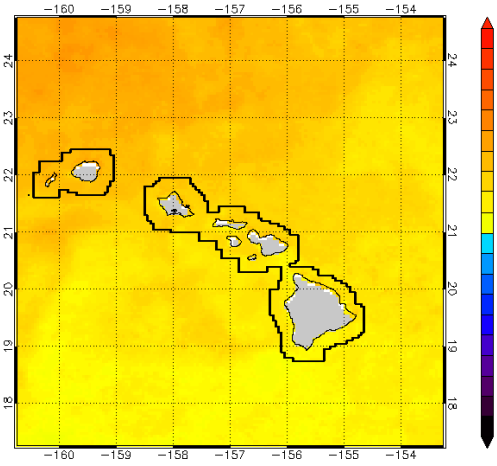
UPDATE: CORAL BLEACHING DATA

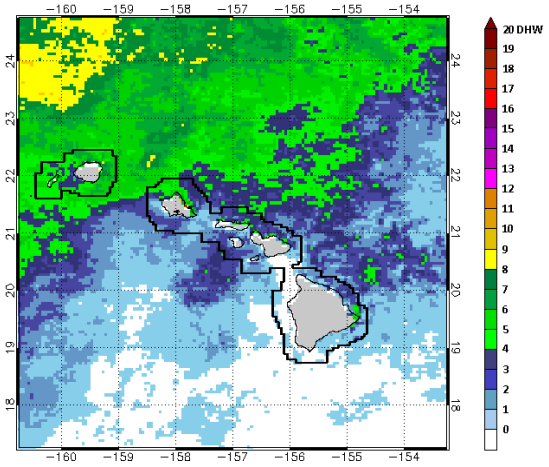
10/13/2014

NOAA CORAL REEF WATCH DATA (http://coralreefwatch.noaa.gov)

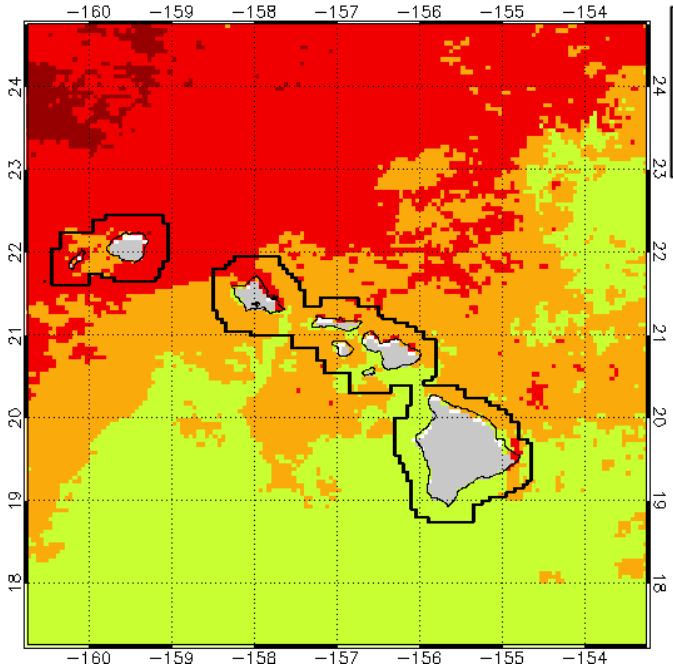
The NOAA Coral Reef Watch Sea Surface Temperature (SST) Anomaly map (top left) shows the difference between today's temperature and the long-term average. The Degree Heating Week map (top right) shows accumulated thermal stress, which can lead to coral bleaching. Significant coral bleaching usually occurs when DHW values reach 4 °C-weeks. At 8 °C-weeks, widespread bleaching is likely and significant mortality can be expected.

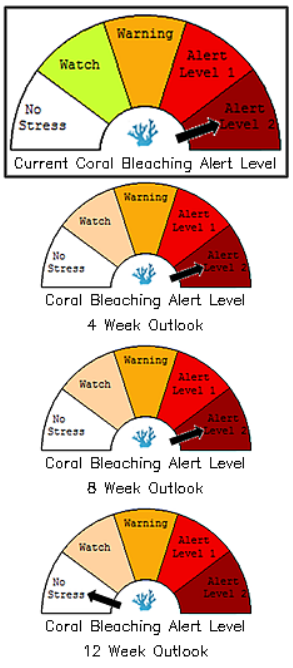


Sea Surface Temperature Anomaly—10/13/2014



Degree Heating Week- 10/13/2014





Coral Bleaching Alert Area and Outlook—10/13/2014

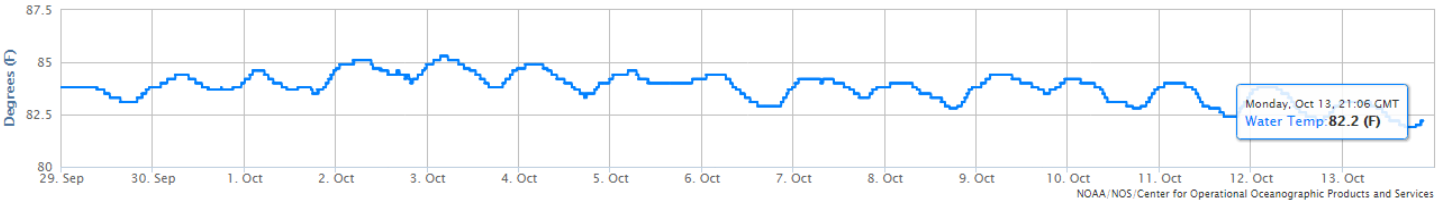
NOAA Potential Bleaching Intensity Levels

No Stress	**No bleaching**
Bleaching Watch	**Possible bleaching**
Bleaching Warning	**Possible bleaching**
Alert Level 1	**Bleaching Likely**
Alert Level 2	**Coral Mortality Likely**

This experimental map product provides a summary of current satellite data as well as forecasted conditions for coral bleaching. The bleaching alert gauges reflect the high alert category observed and forecasted. Currently, the highest coral bleaching category being observed is **'Alert Level 2'** in specific areas. This bleaching alert level is projected to continue for the next 4-8 weeks.

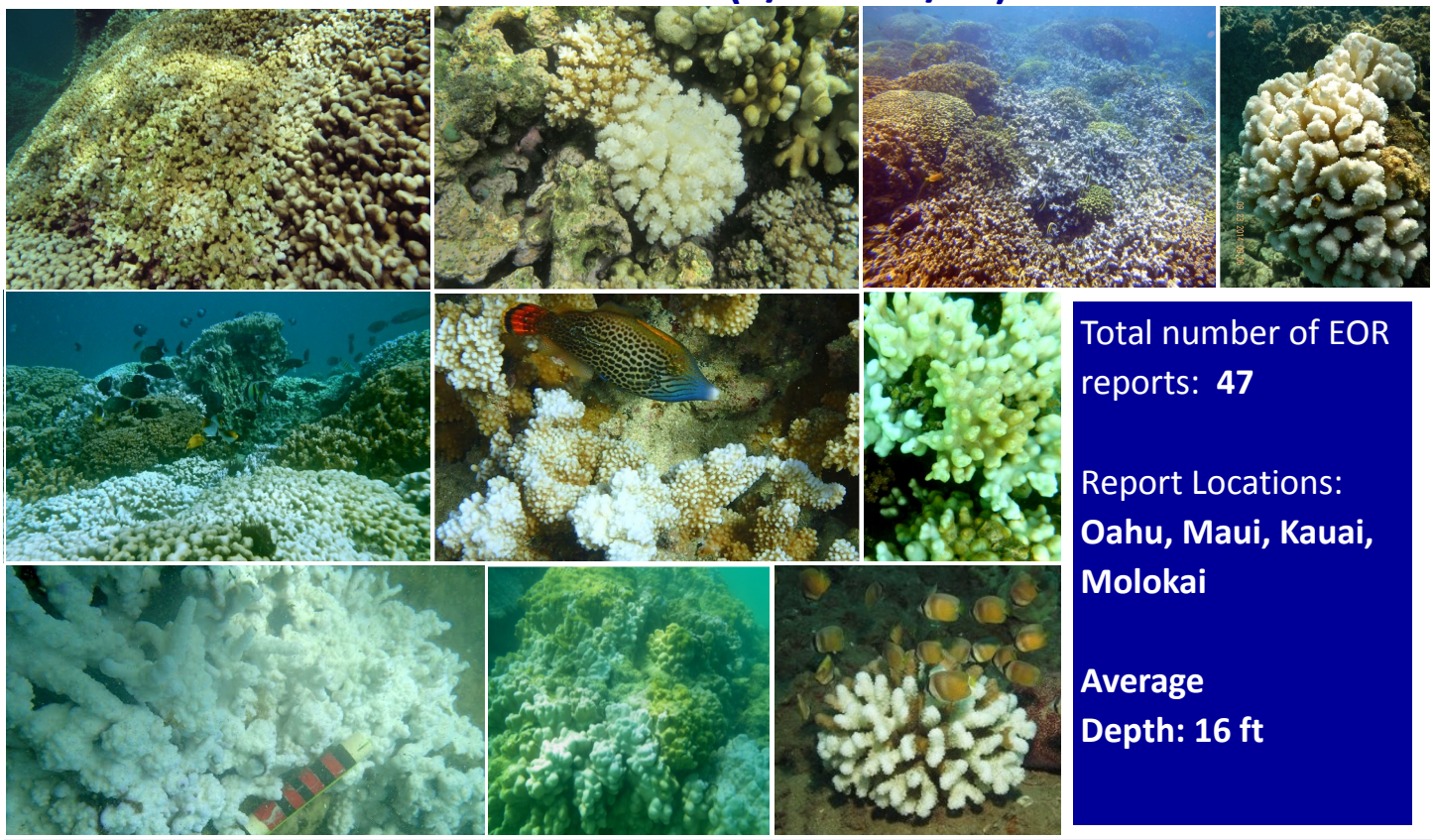
KANEOHE BAY WATER TEMPERATURE DATA

(http://tidesandcurrents.noaa.gov/physocean.htmlbdate=20140929&edate=20141013&units=standard&timezone=GMT&id=1612480&interval=6)



This graph displays water temperature information from the NOAA/NOS/CO-OPS station at Mokuole, HI, located in Kaneohe Bay at the Hawaii Institute of Marine Biology (HIMB). The highest recorded temperature during this time period was 85.3F. The average range for this area is approximately 72-82F. The temperature threshold for coral bleaching is 83F.

EYES OF THE REEF CITIZEN REPORTS (9/21—10/14)

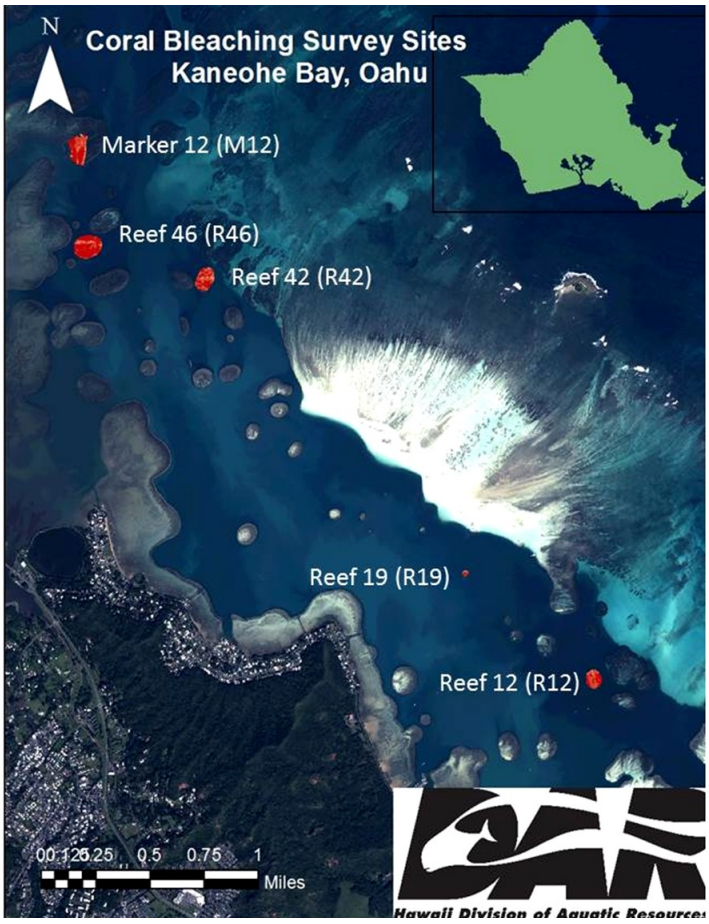


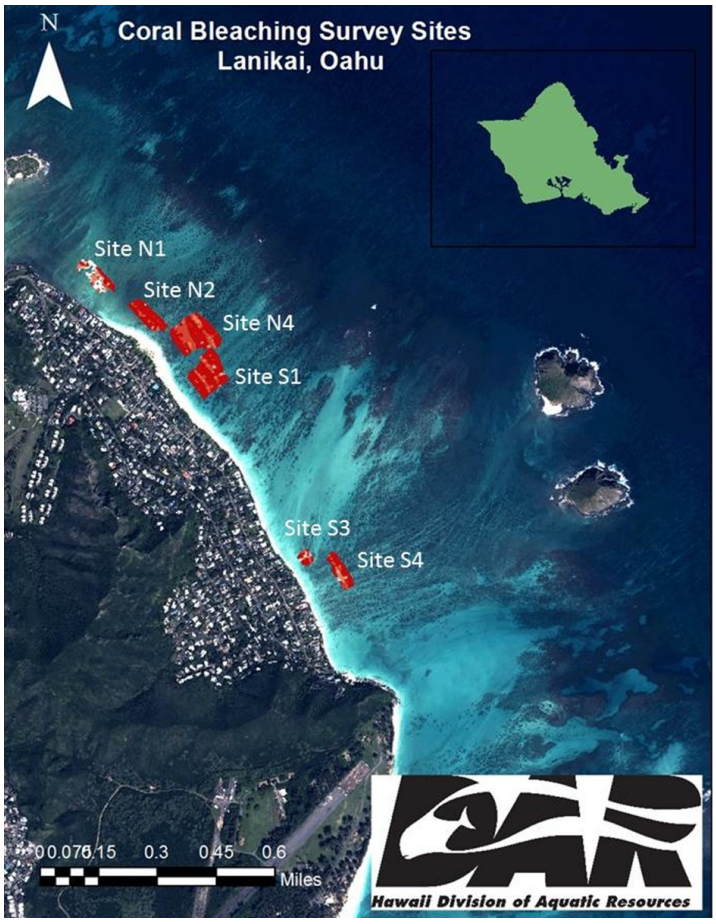
Total number of EOR reports: **47**

Report Locations: **Oahu, Maui, Kauai, Molokai**

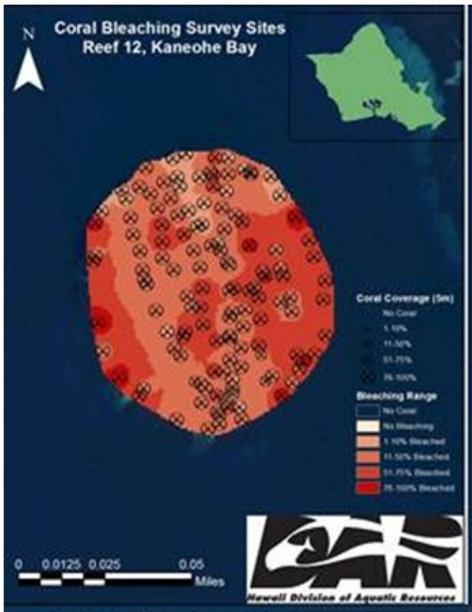
Average Depth: 16 ft

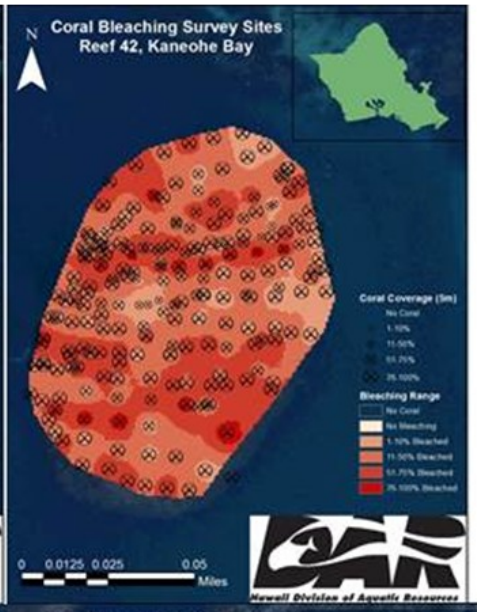
DAR/TNC RAPID ASSESSMENT DATA

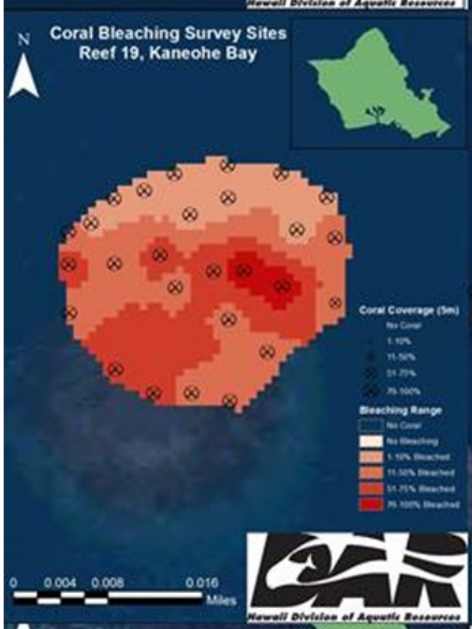


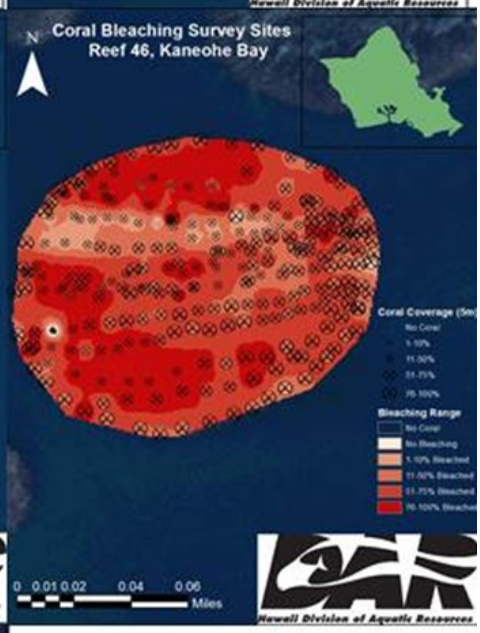


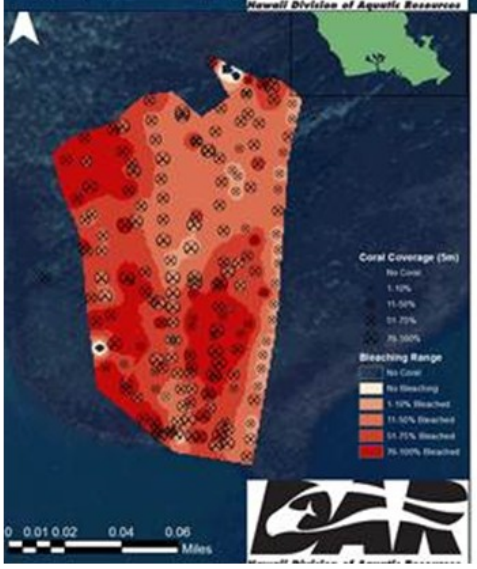
DAR/TNC RAPID ASSESSMENT

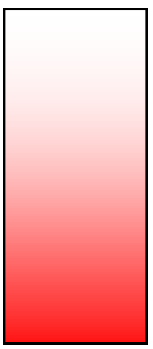












No bleaching

100% bleached

Kaneohe Bay Results:

Total number of reef areas surveyed: **5**

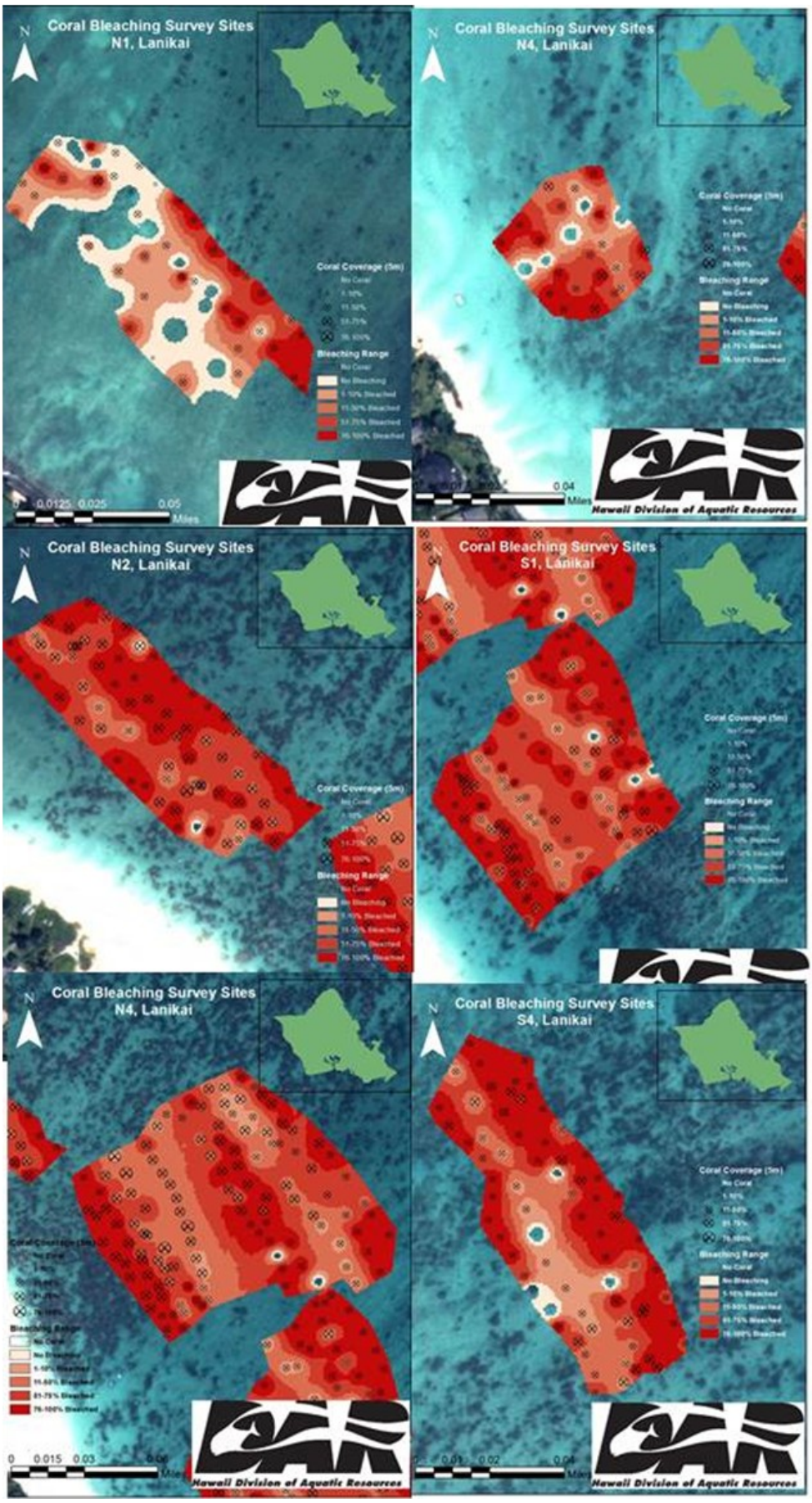
Coral species affected by bleaching include : *Montipora capitata, Montipora patula, Montipora flabellate, Porites compressa, Porites lobata, Pocillopera damicornis, Pocillopora meandrina, Fungia scutaria, Pavona varians, Cyphastrea ocellina, Psammocora stellate.*

On average, 46% of all coral colonies surveyed exhibited signs of bleaching

Pocillopera damicornis (50%), *Porites lobata* (40%), and *Pocillopera meandrina* (40%) exhibited the highest rates of severe bleaching

Montipora capitata exhibited the greatest proportion of bleaching in the Kaneohe Bay (82% on average)

DAR/TNC RAPID ASSESSMENT



Lanikai Results:

Total number of reef areas surveyed: **6**

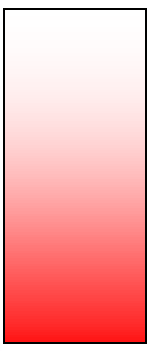
Coral Species Affected: *Montipora capitata, Montipora patula, Montipora flabellate, Porites compressa, Porites lobata, Porites evermanni, Pocillopera damicornis, Pocillopora meandrina, Fungia scutaria, Pavona varians, Cyphastrea ocellina, Psammocora stellate.*

On average 38% of all coral colonies surveyed exhibited signs of bleaching

Severe bleaching (highest bleaching score) was exhibited in over 80% of *Montipora capitata, Pocillopera meandrina, and Pocillopera damicornis*

More information, videos, images:

dlnr.hawaii.gov/reefresponse



No bleaching

100% bleached