



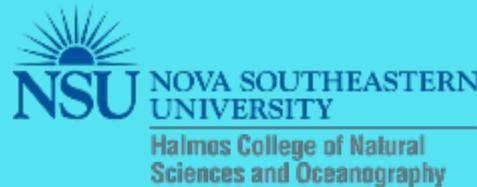
# Hurricane Irma Response and Recovery Field Work Updates Triage & Stabilization

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# PARTNERS



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NATIONAL MARINE  
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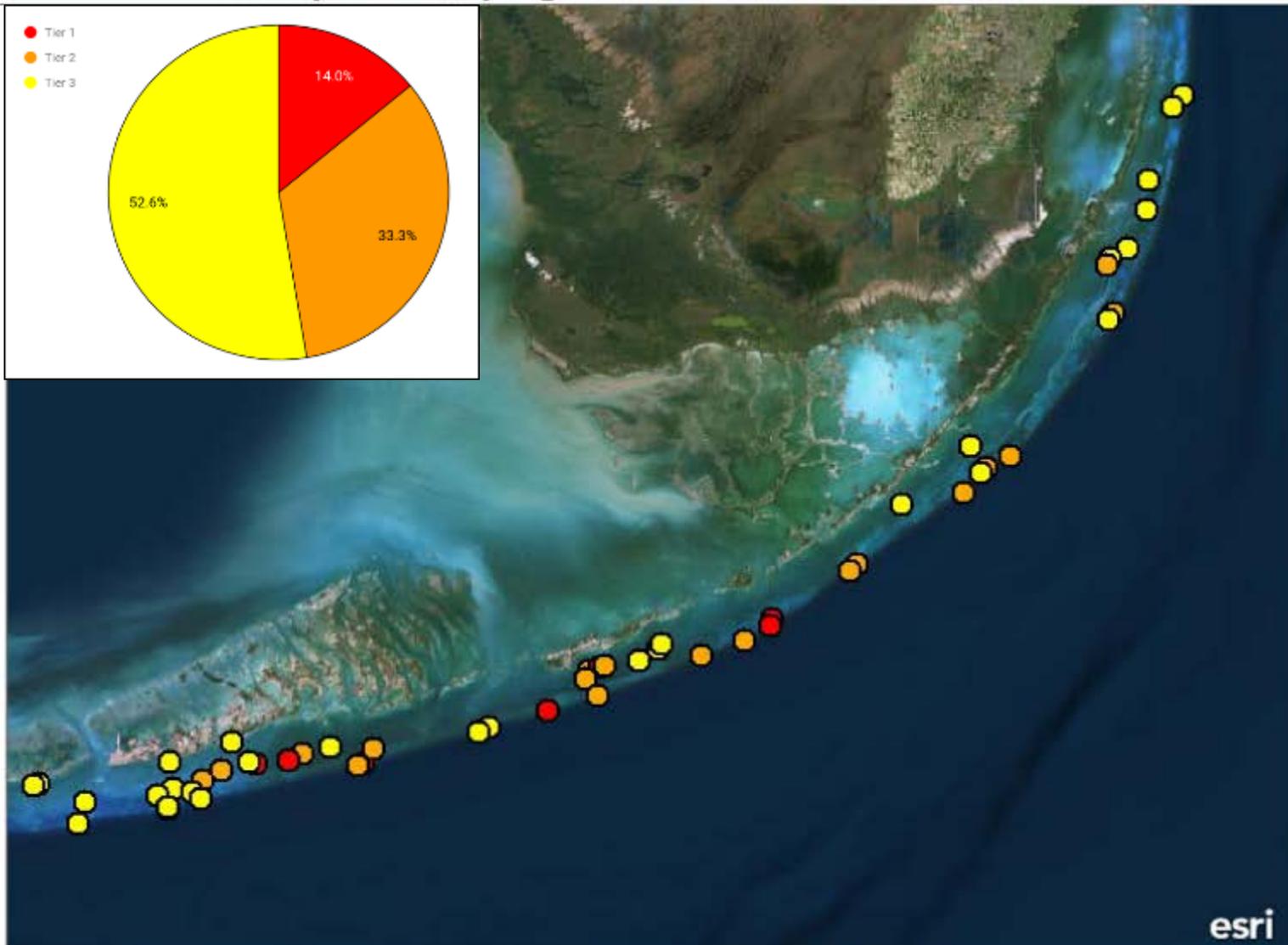
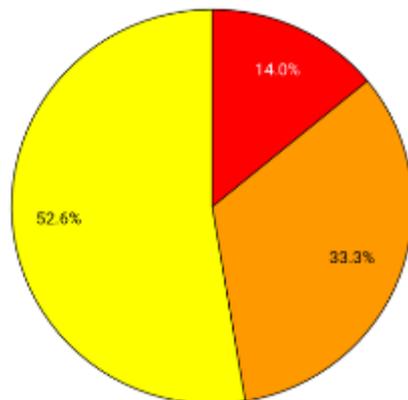
FLORIDA KEYS

# Rapid Assessment Injury Class Sites/Response Tiers

## Rapid Assessment (Injury Class Designation)

- Tier 3
- Tier 2
- Tier 1

- Tier 1
- Tier 2
- Tier 3

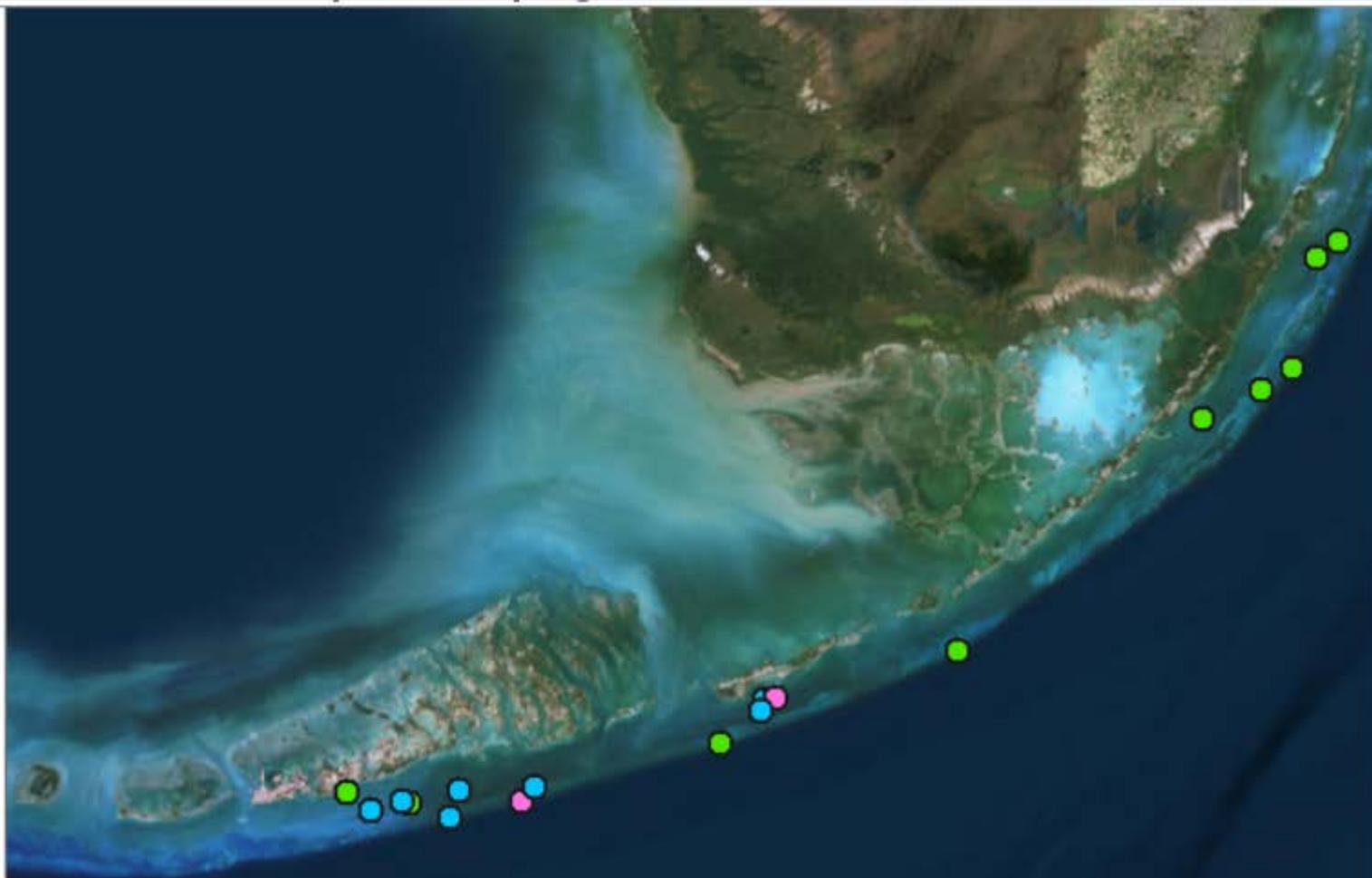


# Triage Response Status



## Triage Status

- No action
- Pending resources
- Completed
- Partially completed
- Unassigned
- Underway



# Triage Response Stats:

> 1850 Colonies Rescued



| Reef Site                    | Triage Conducted   |
|------------------------------|--|
| Elbow                        | ~350 elkhorn fragments stabilized  |
| Tennessee                    | ~25 large mounding stabilized  |
| Sombrero                     | 3 very large and ~50 moderate to large mounding corals stabilized.                   |
| Dustan Rocks                 | ~150 moderate to large mounding corals stabilized.                                   |
| Horseshoe                    | ~600 elkhorn fragments stabilized  |
| Looe Key                     | ~15 very large, ~50 large, and ~150 moderate mounding corals. ~10 elkhorn fragments. |
| Mimi's Patch                 | ~20 large to very large and ~100 moderate mounding corals.                           |
| Marker 32                    | 1 very large pillar coral and ~25 small-moderate mounding corals.                    |
| Grecian Rocks                | Count Pending  |
| Turtle Rocks                 | ~100 moderate to large mounding corals and staghorn corals.                          |
| IRMA_105 - Mid Channel Patch | 10 very large, ~50 large, and ~150 moderate mounding corals.                         |

# Triage Response Operations:

## Rescue Team and Volunteers Field Training



# Triage Response Operations:

## Up-righting massive boulder corals & stabilization



### Rescue & Lift large corals from sand grooves back onto reef framework



# Triage Response Operations:

Iconic Pillar coral rescued, lifted and reattached



Marker 32: Lift and re-cement colony on spur



1.7 m L x 3/4 m W  
900 lbs lift to raise

# Triage Response Operations:

Medium corals uplifted from sand grooves, stabilized



Raise or upright loose medium corals, epoxy or stabilize back on reef substrate



# Triage Response Operations:

Fragment stabilization and reattachment



Cache, epoxy and/or wedge loose frags & small corals to promote reattachment



# Triage Response:

## Debris and trap gear cleanup



# Triage Response Operations:

## Baseline Monitoring for Fate Tracking Outplants



# Triage Response Complete:



## Next Steps

- **Trap & Marine Debris Removal from reefs**
- **Continue NRA - Derelict Vessel & Vessel Debris Removal**
- **Finalize assessment in Florida Keys & SE Florida:  
Analyze data from response efforts to complete reports**
- **Monitoring Fate of Outplants**

**While there was significant damage, substantial resilience of our reefs was also observed**





## **VIDEOS and More Pics**

**Check out more Photos and Videos of Hurricane Impacts on our website:**

<https://floridakeys.noaa.gov/whatsnew/releases/2017/post-hurricane-irma-gallery.html>

<https://floridakeys.noaa.gov/whatsnew/releases/2017/20171024-noaa-partners-assess-coral-reef-damage-following-hurricane-irma.html>

**Great Force Blue Video: pillar coral rescue, check out our Facebook page**

<https://www.facebook.com/floridakeysnoaagov>

# Assessment & Triage Response Observations :

## Reef Framework Fractures

**Substrate impacts: framework cracks, fissures, rubble mounds/fields**



# Triage Response Operations:

## Aggregated Trap Debris



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### Sombrero Reef sand grooves



### Mixed with Vessel Hull debris



# Triage Response Observations:

## Upper Keys Algal Blooms post-Hurricane



### Snapper Ledge – 5 weeks post-Irma



### Molasses Reef slope 6 weeks post-Irma



# Marine Debris: Traps, trap parts, trap line

