



Florida Reef Tract Coral Disease Outbreak: Update on Status and Response Efforts

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SE Regional Administrator

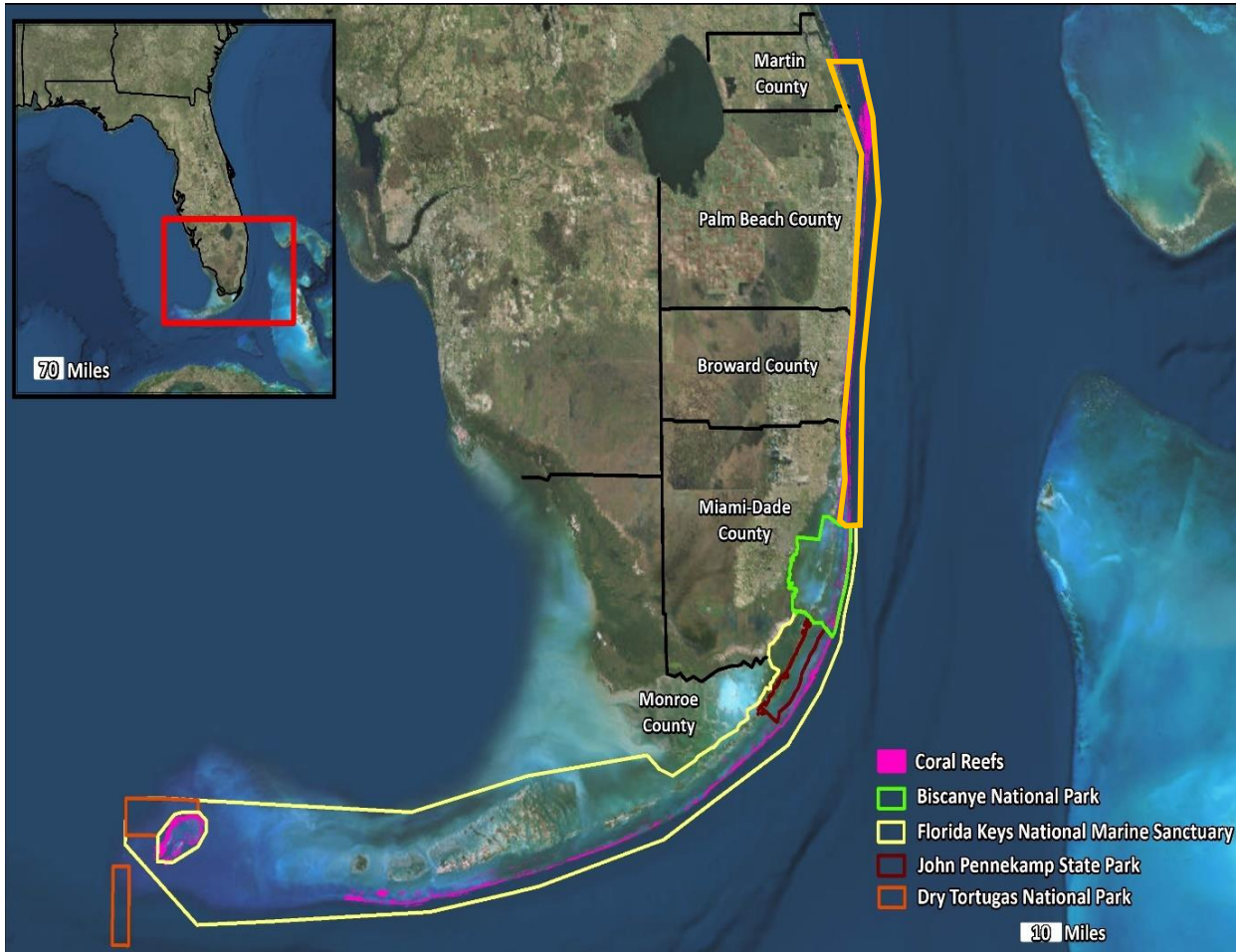
Oct. 12, 2018

DEP Florida Coastal Office



Florida's National Treasure

Florida Reef Tract

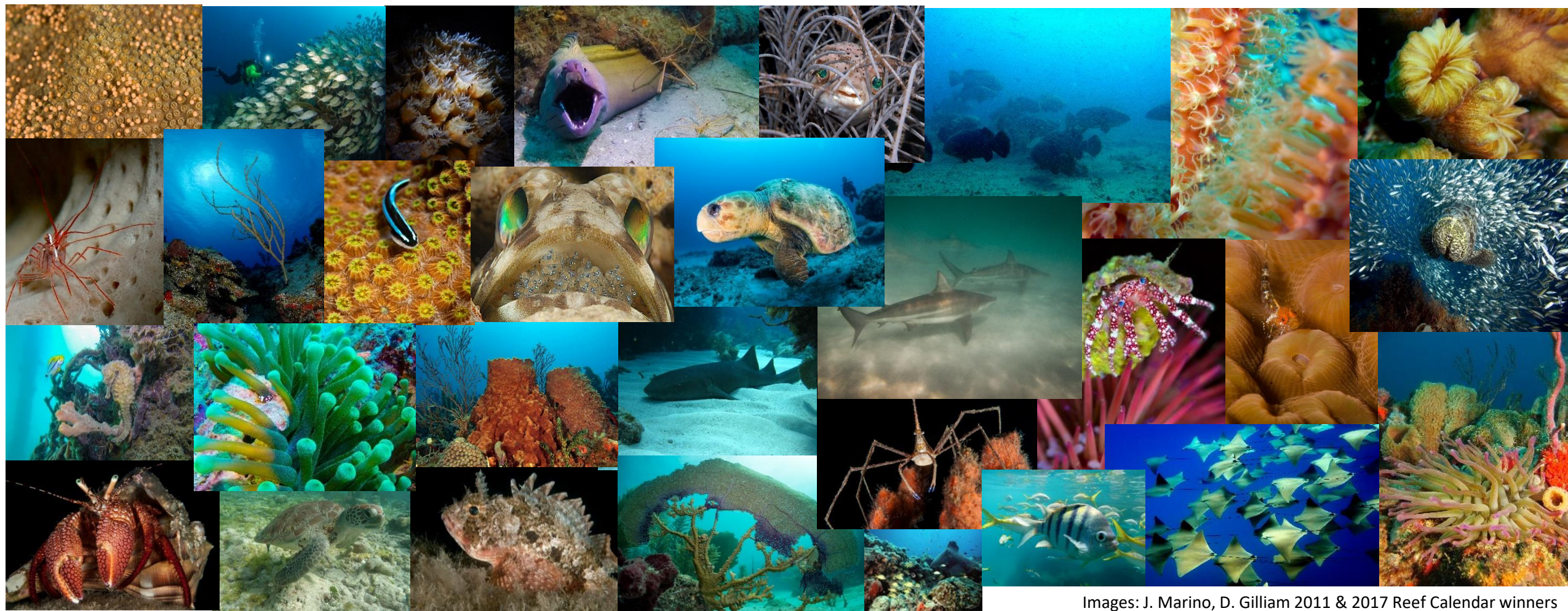


Images: DEP, D. Gilliam, NOAA



Florida's Natural Treasure

Florida Reef Tract



Images: J. Marino, D. Gilliam 2011 & 2017 Reef Calendar winners



Economically Essential

An illustration of a coastal scene. In the foreground, there is a blue body of water with several small fish. In the middle ground, there are mangrove trees with their roots exposed in the water. To the left, a red cargo ship is docked at a pier. To the right, a brown fishing boat is on the water. In the background, there is a city skyline with various buildings, including a yellow building with a bird on its roof. The sky is light blue with a few clouds and a small airplane flying.

Mapping Ocean Wealth
demonstrates what the ocean does for
us today so that we maximize what the
ocean can do for us tomorrow

The Nature Conservancy | oceanwealth.org



Economically Essential

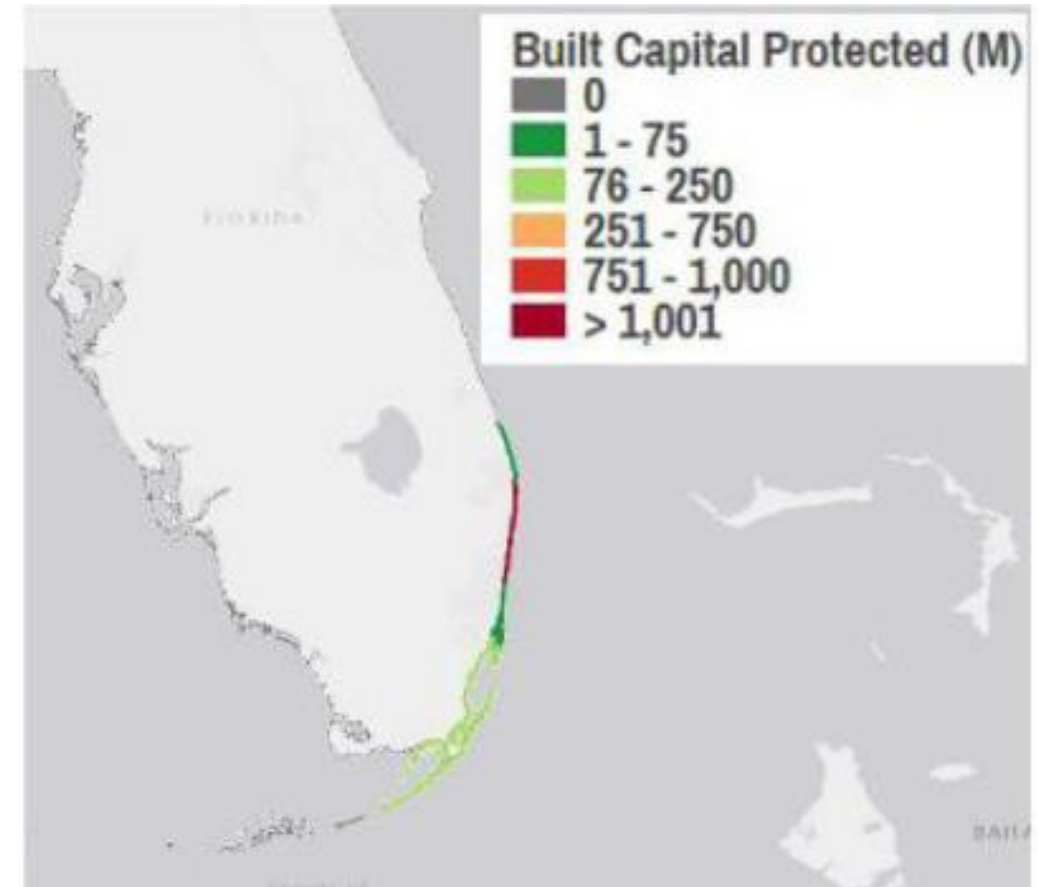
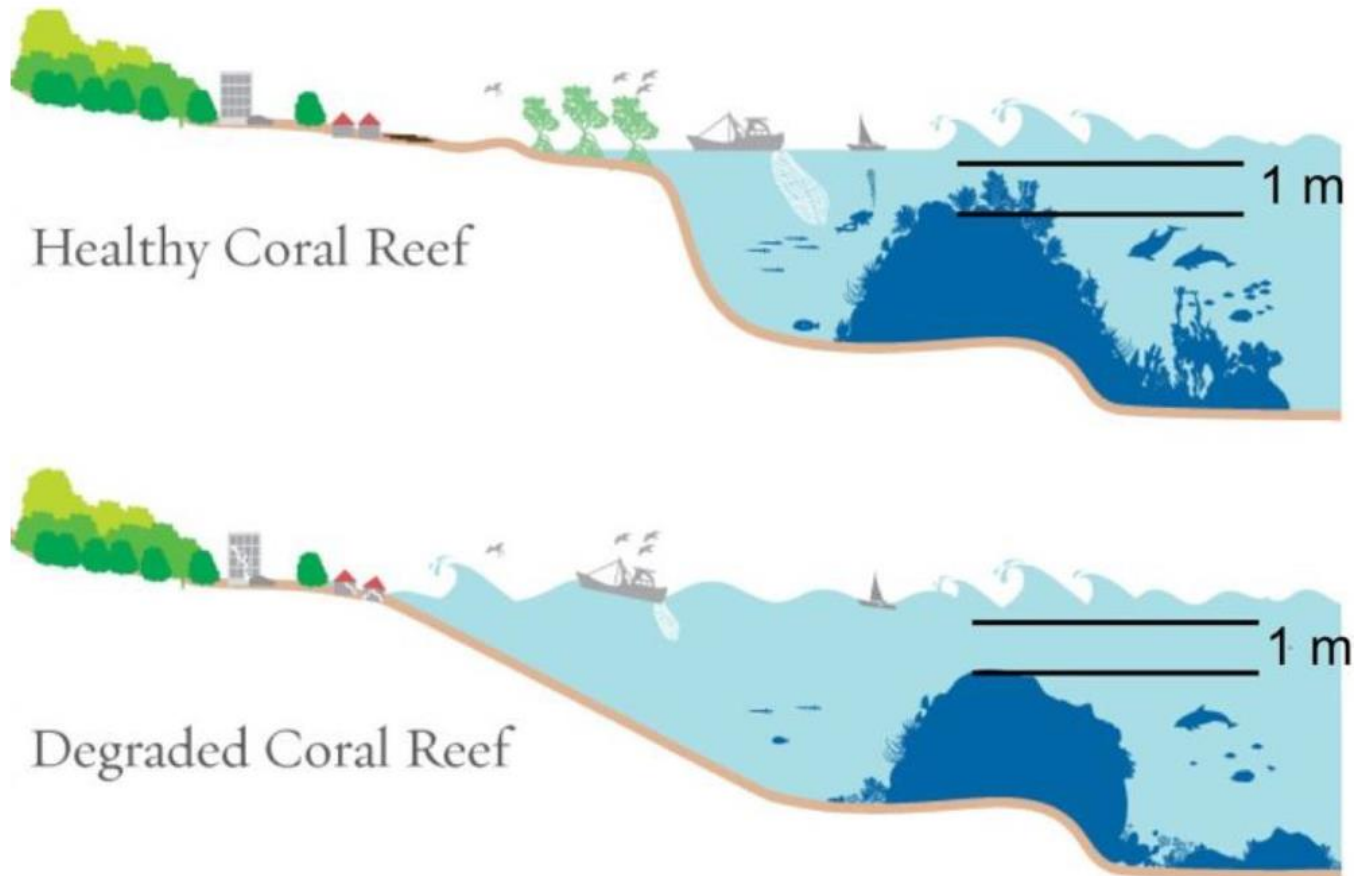
Coastal Protection



Photos By: Hal Pierce; Ken Banks



Economically Essential *Coastal Protection*



Images from: Mapping Ocean Wealth



Economically Essential

Fisheries Habitat





Economically Essential

Biomedical & Drug Research

MARINE BIOMEDICAL
& BIOTECHNOLOGY RESEARCH





Economically Essential

Tourism



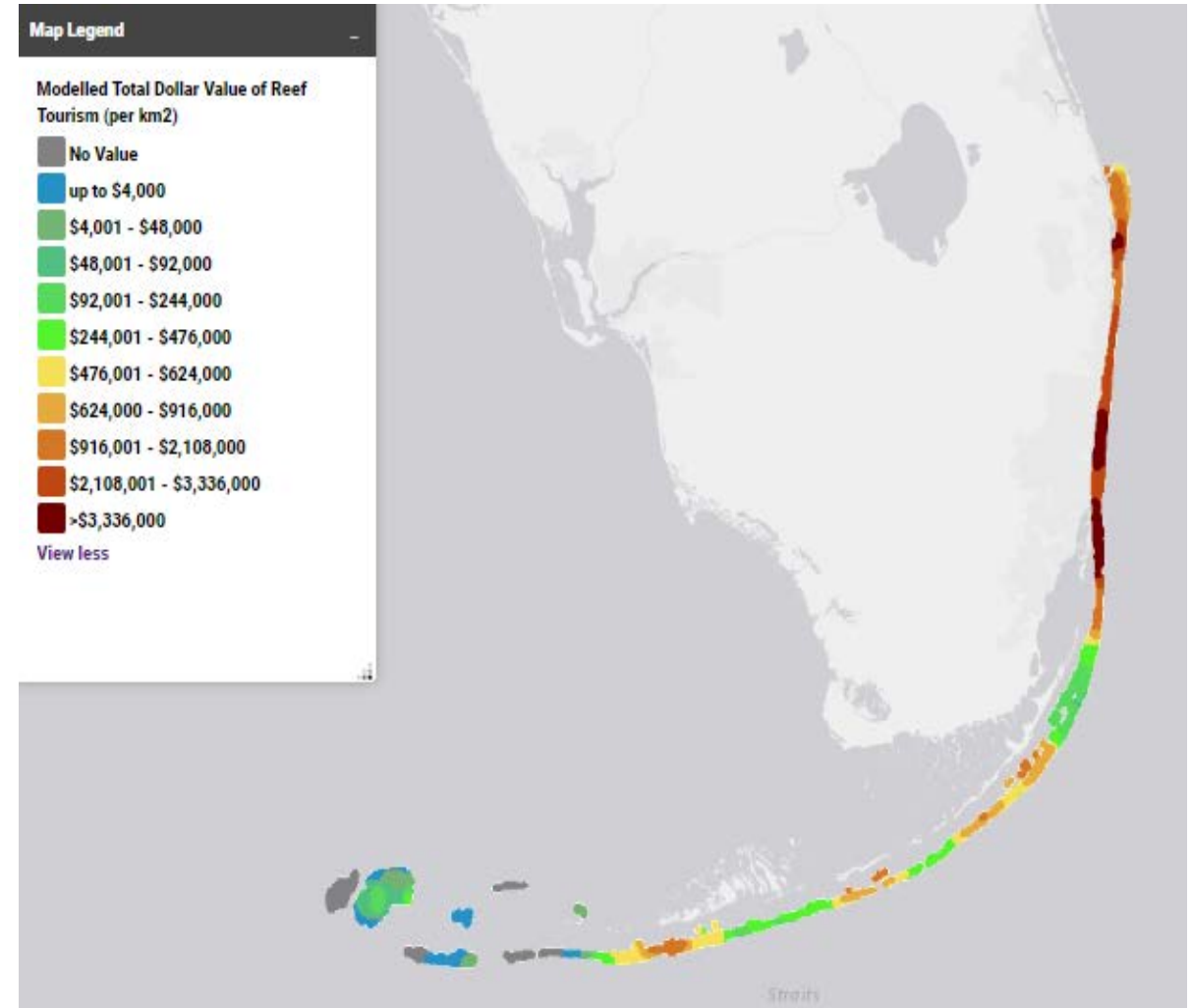


Economically Essential

On Reef & Adjacent to Reef
Tourism Value of Florida's
Coral Reefs per Year (USD)

\$1,152,313,000

According to The Nature Conservancy's
Mapping Ocean Wealth





Economically Essential

Estimated to annually support **71,000 jobs** and generate **\$6.3 billion in sales and income**

(Johns et al, 2001 & 2004)



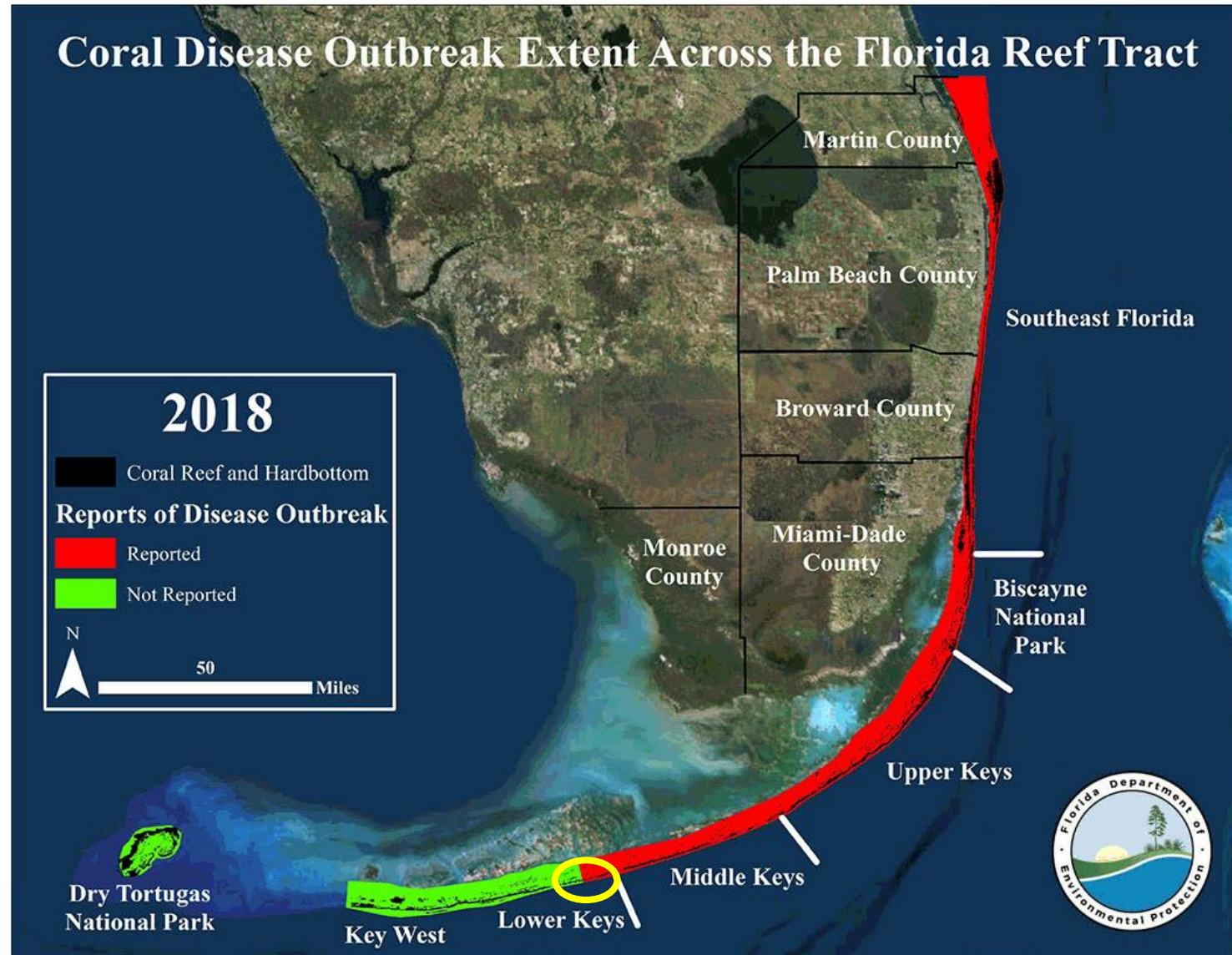


Florida's Coral Disease Outbreak





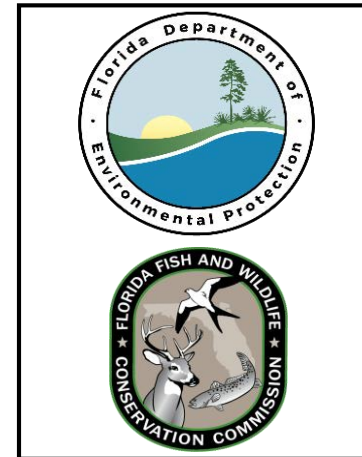
Florida's Coral Disease Outbreak





Disease Response Partners

Coordinated Multi-faceted Response Effort





Disease Response Update

Since June 2018

Wrap up of FY17 DEP-funded projects

Over \$500,000 in coral disease projects completed, including:

- Surveillance and monitoring efforts
- Spatial epidemiological modeling
- Lab-based treatment trials
- Sample collection
- Pathogen isolation experiments



<https://floridadep.gov/fco/coral/content/florida-reef-tract-coral-disease-outbreak>

(Google: FDEP Coral Disease)



Disease Response Update

Since June 2018

3-Day Coral Disease Technical Workshop:

- Intervention action framework for adaptive decision making
- Coral 'rescue' actions
- Monitoring and research priorities
- Outplanting/restoration trials
- Opportunities for community engagement
- **Recommendations for response capacity & ecosystem resilience**



July Workshop Participants. Photo: FDEP



Disease Response Update

Since June 2018

Coral Disease Tourism and Local Business Briefing:

- Coral disease messaging and communications opportunities
- Engagement of local business and tourism leaders
- **Recommendation to develop a statewide call to action campaign for Florida's coral reefs**



July Meeting Participants. Photo: Martin County



What's Next?

Continue coral disease investigation





Continuing Disease Response

In FY18, DEP is funding \$2+ million in additional coral disease projects, including:

- In-water disease intervention action trials
- Continuing lab-based intervention tool development
- Pathogen isolation and investigation of potential probiotics
- Genetic preservation – coral spawning assistance



Diver applying in-situ disease intervention. Photo: NSU

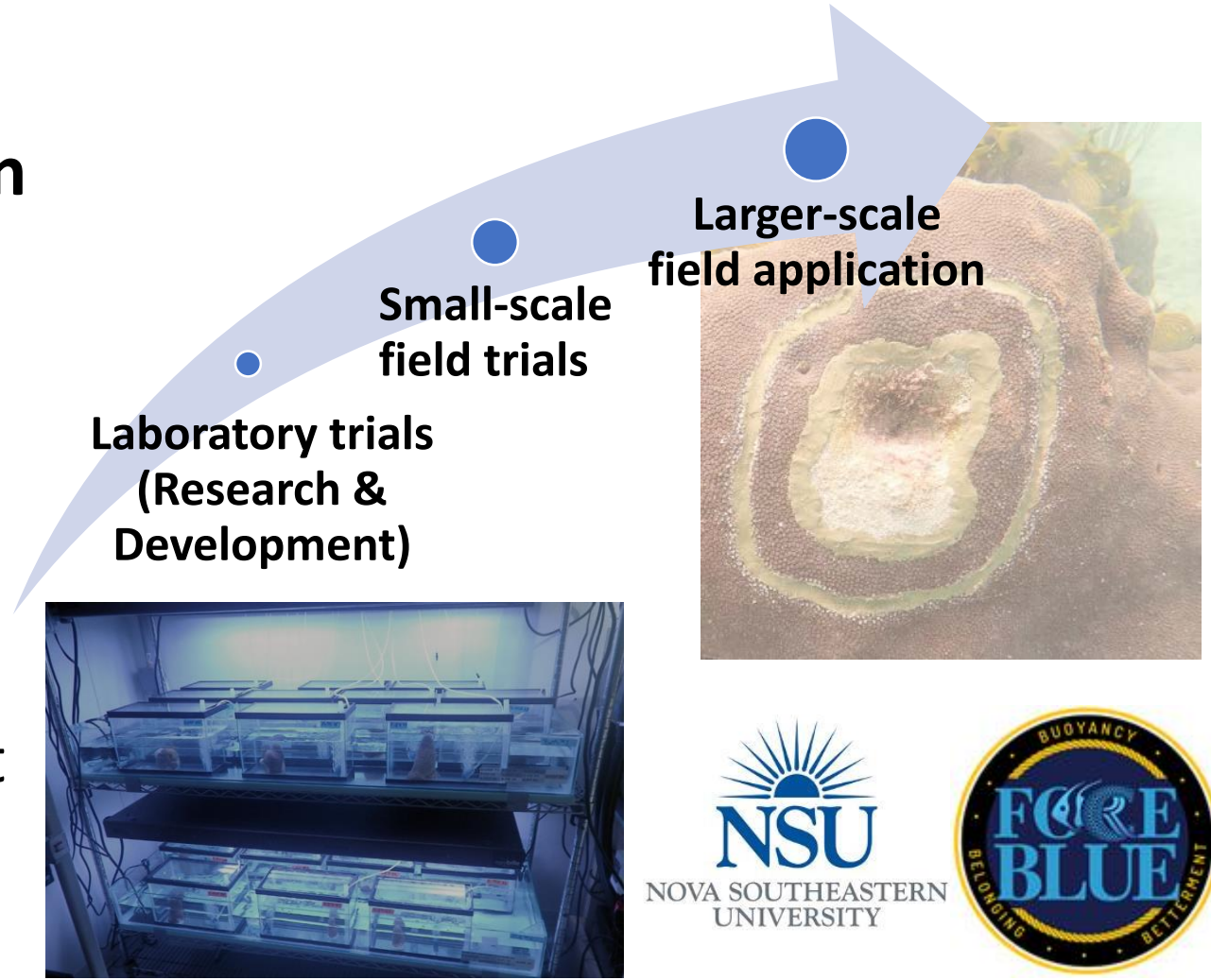


Continuing Disease Response

In FY18, DEP is funding \$2+ million in additional coral disease projects, including:

Coming Soon:

- In-water disease intervention and coral rescue Strike Teams
- Land-based infrastructure support for rescued wild corals
- Restoration Trials





Protecting Florida's Coral Reefs

Short Term:

**Enhance
Disease
Response
Capacity**

=

Triage



WE NEED YOU!

Long-term:

**Address
Environmental
Enabling
Conditions**

=

**Restore
Ecosystem
Resilience**



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