



MEMORANDUM

To: Council Members AGENDA ITEM 10

From: Staff

Date: October 18, 2019

Subject: Southeast Florida Coral Reef Tract Update – Presentation by Joanna C. Walczak, Southeast Regional Administrator, Office of Resilience and Coastal Protection, Florida Department of Environmental Protection and Joint Resolution TCSF #19-05

Introduction

Building on consensus from the prior year recognizing the coral disease crisis, at their October 12, 2018 joint meeting the Treasure Coast and South Florida Regional Planning Councils adopted Resolution TCSF #18-04 requesting that the Legislature establish a long-term recurring revenue source to provide adequate and flexible funding to support dedicated staff; infrastructure to maintain reproductive coral populations; research to identify pathogens; restoration of coastal water quality through wastewater treatment upgrades, septic to sewer conversions, stormwater treatment, and closure of ocean outfalls; and a public information campaign.

Throughout the year, both Councils continued working on coral and water quality initiatives with local, state, and federal agency staff and elected officials, as well as the Joint Committee on the Southeast Florida Coral Reef Tract. With this memorandum, staff seeks to update Council on its continuing efforts and to request the Councils execute a joint resolution urging Florida's Governor and Legislature to establish a long-term, recurring revenue source to provide adequate and flexible funding for coral reef disease response, ecosystem restoration, and to better address harmful environmental conditions enabling the disease epidemic that is critically damaging the Florida Reef Tract.

Background

The Florida Reef Tract continues to experience a significant coral disease outbreak of epidemic proportions stretching from St. Lucie Inlet in Martin County to reefs past Key West in Monroe County (roughly 300 linear miles). Signs of this coral disease have now also been reported in nine locations around the Caribbean, including the US Virgin Islands. Experts agree this is the worst coral disease outbreak ever documented on the planet.

The stakes are high. The Florida Reef Tract comprises the only living nearshore coral reef ecosystem in the continental United States. In addition to its unique ecology, the Florida Reef Tract is of huge economic importance to Southeast Florida. This nearshore marine ecosystem is essential for supporting over 71,000 jobs and contributing over \$6 billion to Florida's economy, while annually serving approximately 6 million residents and over 38 million tourists. In addition, Florida coral reefs are the first line of defense for our beaches and coastal communities against wave action and storm surge, providing annual flood protection valued at over \$675 million and over \$1 billion during extreme weather events.

Overview

A summary of Council actions and other noteworthy initiatives related to this issue includes the following:

- Council supported legislation last session which contributed a roughly \$4 million appropriation for the Florida Department of Environmental protection (FDEP) (FY 19-20) to continue coral disease response and water quality monitoring activities. The combined bills passed and have been signed by the Governor. In addition, the Fish and Wildlife Commission (FWC) has allocated roughly \$2 million in Hurricane Irma disaster funds over two years for related coral restoration.
- This year, FDEP included an increased amount in their recent agency budget request to the Legislature for FY 20-21 to continue the programs for the Florida Reef Tract.
- In August, U.S. Senators Marco Rubio and Rick Scott, as well as U.S. Representative Darren Soto, introduced the Restoring Resilient Reefs Act of 2019, a piece of bicameral legislation that would update and reauthorize the Coral Reef Conservation Act of 2000. The legislation is currently being considered by relevant committees.
- The US Coral Reef Task Force has heard several updates on the coral disease outbreak in Florida and the Caribbean. The Task Force articulated the importance of addressing this issue and supports both national and local response efforts.
- An annual technical workshop of coral disease experts convened in August to help determine the highest priority management actions related to the coral disease outbreak. Priorities included new avenues of research, continued coral disease treatments, and the need to begin large-scale coral propagation for eventual ecosystem restoration.

Conclusion

The coral reef disease outbreak continues to seriously degrade and jeopardize the entire nearshore reef ecosystem within the five-county area between Martin and Monroe counties. It is spreading rapidly and requires further aggressive, coordinated action. The proposed Joint Resolution TCSF #19-05 from the Councils urges Florida's Governor and Legislature to establish a greater sense of urgency and long-term, recurring funding for solutions that can help restore and protect the entire Florida Reef Tract.

Recommendation

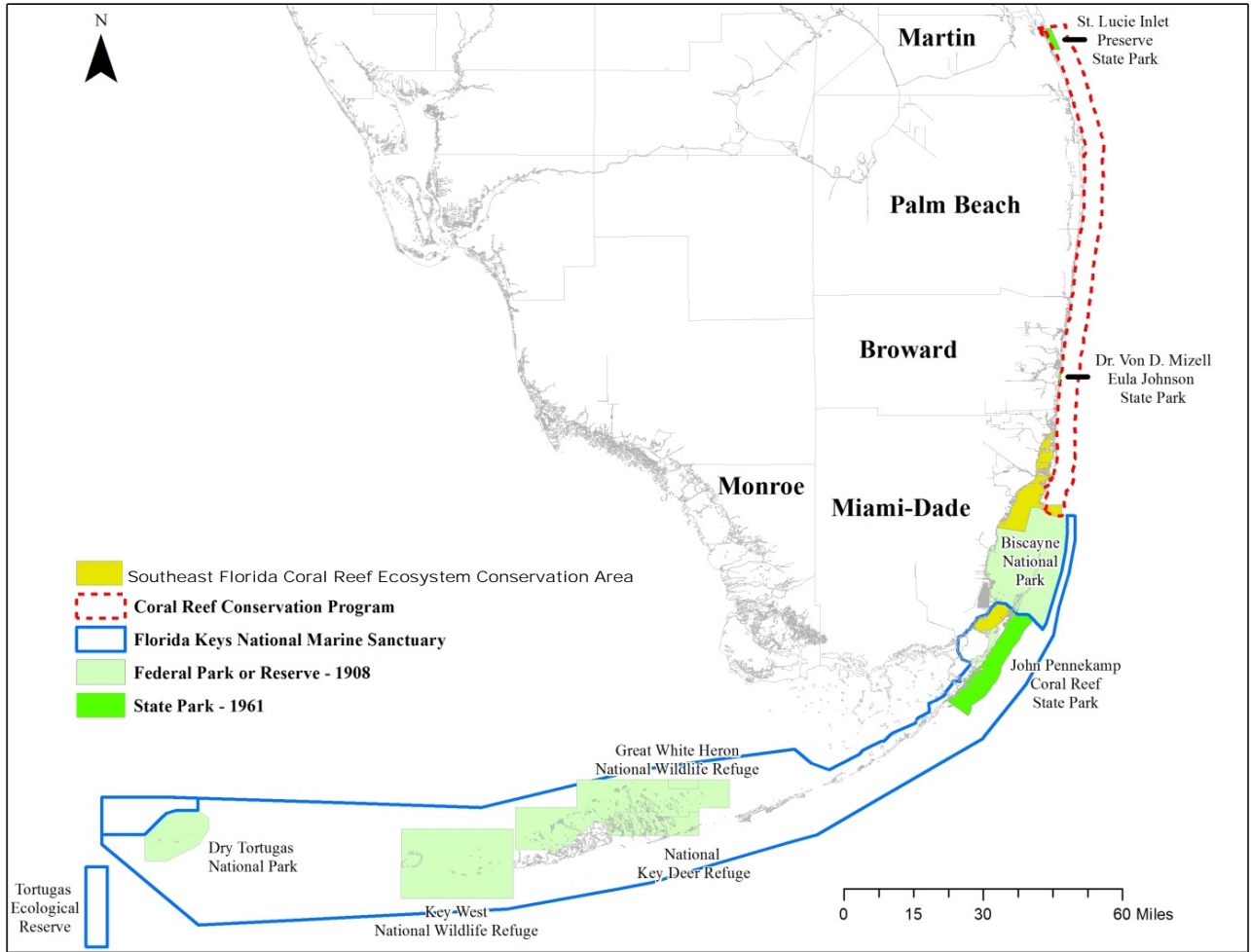
The Councils should authorize each Chairman to sign and transmit the attached joint resolution urging Florida's Governor and Legislature to establish a long-term, recurring revenue source to provide adequate and flexible funding for coral reef disease response and to better address the harmful environmental conditions enabling the disease epidemic that is critically damaging the Florida Reef Tract.

Joint Council Action – October 25, 2019

Attachments

1. Map of Reef Areas
2. Summary
3. Map of Outbreak Spread and Partners in Response
4. Disease Occurrence Map as of September 18, 2019
5. Resolution TCSF #19-05

ATTACHMENT 1





Florida Reef Tract Coral Disease Outbreak

The Florida Reef Tract is currently experiencing a widespread and lethal coral disease outbreak. The Florida Department of Environmental Protection is working with dozens of partners from federal, state, and local agencies, non-governmental organizations, universities, and members of the community to investigate and solve this problem.

Key factors of the outbreak include:

- **Large geographic range.** Over half of the Florida Reef Tract has been affected – over 96,000 acres.
- **Duration of the outbreak.** Disease has continued to spread for more than four years.
- **Number of coral species affected.** 20+ of approximately 45 species of Florida's reef-building corals have been affected.
- **Significantly high prevalence.** Within certain species, disease is seen in 66-100 out of every 100 colonies surveyed.
- **High rates of disease transmission and mortality.** Once a coral begins to lose living tissue, observations show that the colony will die within weeks to months.

In FY 17 & FY 18, the state of Florida allocated \$1 million to support Florida's coral reefs, including disease response activities.

Priority coral disease response activities include:

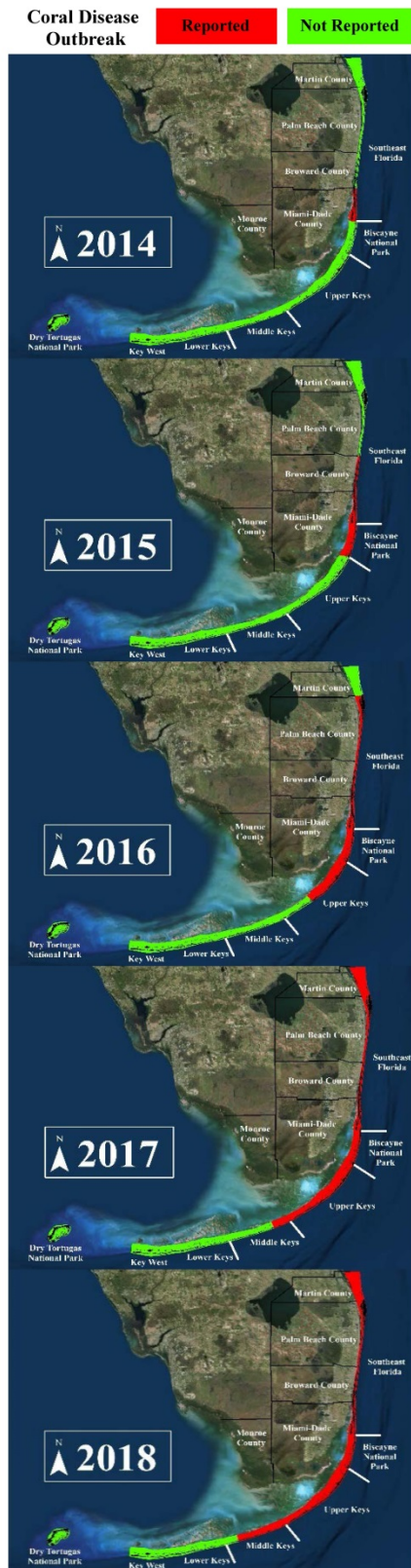
- **Coral disease investigation training** on coral disease identification, ecology and investigation techniques.
- **Coral disease surveys and fixed site monitoring** to document the spatial extent, mortality rates and species-specific impacts.
- **Strategic sampling and laboratory analysis** to identify the presence of pathogens potentially responsible for the disease outbreak.
- **Data management and epidemiological analysis** to analyze relevant datasets and determine what factors may influence disease progression.
- **Sampling plan and disease intervention workshops** to determine priority data needs and potential management options to mitigate disease impacts.
- **Intervention experiments and field trials** to assess the effectiveness of treatment techniques and prevent the further spread of disease.

For More Information Visit:

www.floridadep.gov/fco/coral/content/florida-reef-tract-coral-disease-outbreak

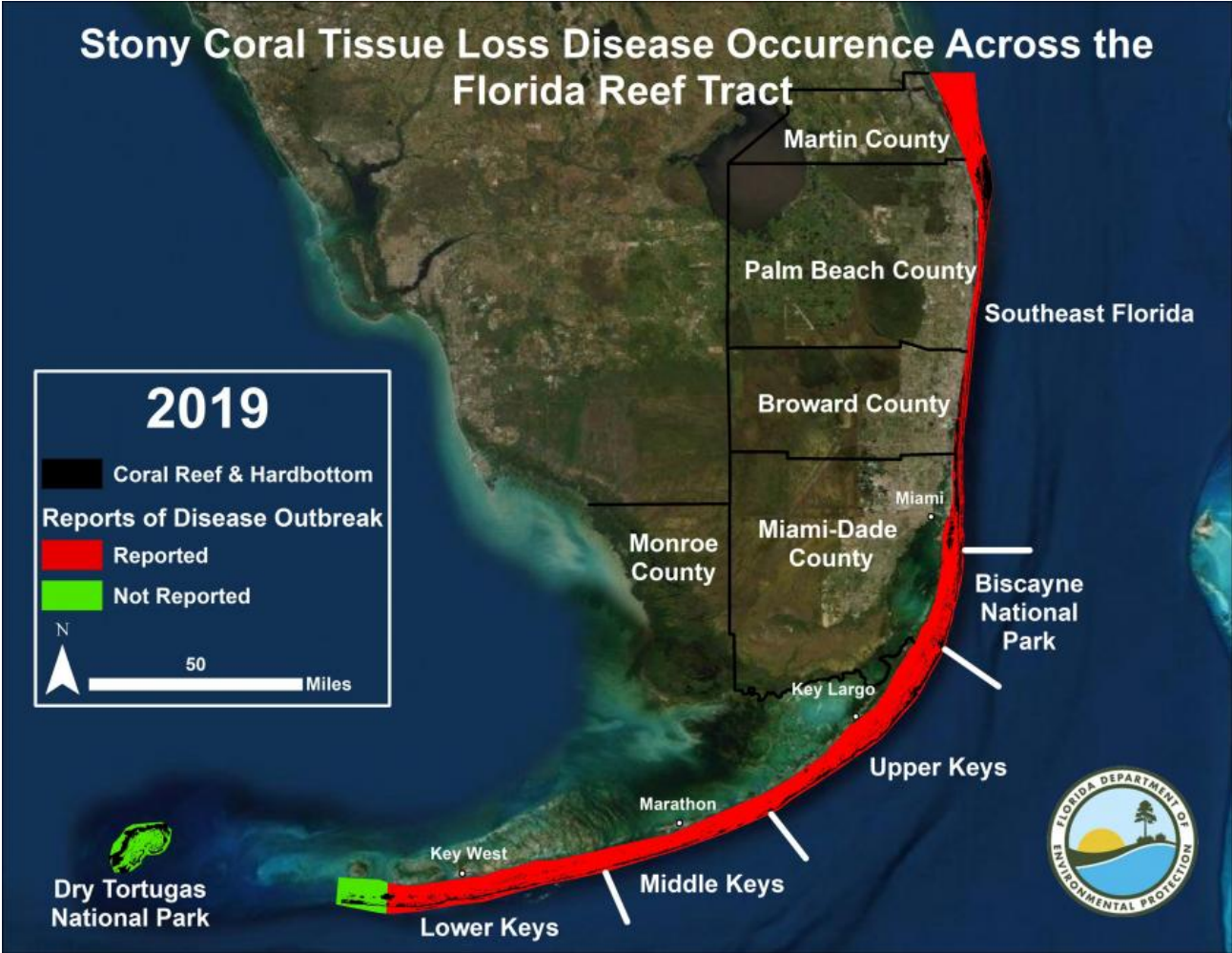


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Coral Disease Outbreak on the Florida Reef Tract 2014-2018

Numerous partners have contributed to a multi-faceted response effort:





RESOLUTION TCSF #19-05

A JOINT RESOLUTION OF THE SOUTH FLORIDA AND TREASURE COAST REGIONAL PLANNING COUNCILS REPRESENTING THE LOCAL GOVERNMENTS OF MONROE, MIAMI-DADE, BROWARD, PALM BEACH, MARTIN, ST. LUCIE, AND INDIAN RIVER COUNTIES, FLORIDA; URGING THE GOVERNOR AND FLORIDA LEGISLATURE TO ESTABLISH A LONG-TERM, RECURRING REVENUE SOURCE TO PROVIDE ADEQUATE AND FLEXIBLE FUNDING FOR CORAL REEF DISEASE INTERVENTION AND RESTORATION AND TO BETTER ADDRESS HARMFUL ENVIRONMENTAL CONDITIONS ENABLING THE DISEASE EPIDEMIC CRITICALLY DAMAGING THE FLORIDA REEF TRACT, WHICH CONSISTS OF THE SOVEREIGN SUBMERGED LANDS AND STATE WATERS OFFSHORE OF MONROE, MIAMI-DADE, BROWARD, PALM BEACH, AND MARTIN COUNTIES; AND SUPPORTING FEDERAL LEGISLATION FOR INCREASED FUNDING OF RESPONSE ACTIVITIES AND CODIFICATION OF THE CORAL REEF TASK FORCE

WHEREAS, the South Florida and Treasure Coast Regional Planning Council’s seven county geographical area is comprised of Broward, Indian River, Martin, Miami-Dade, Monroe, Palm Beach, and St. Lucie counties and 122 municipalities, which contain over 6.7 million residents or nearly one-third of the State’s population, responsible for generating over one-third of the State’s gross domestic product; and

WHEREAS, the Florida Reef Tract runs parallel to our coastline from Monroe County north to Martin County, and is a valuable national resource that protects our shores and beaches by reducing wave energy from storms and hurricanes, providing flood protection valued at over \$675 million per year and over \$1 billion during extreme weather events; and

WHEREAS, Florida’s coral reef ecosystem provides a vital marine habitat for over 6,000 species, including species found nowhere else on earth; and

WHEREAS, this habitat is essential to our commercial fishing and tourism industries, supports over 71,000 jobs within the region, and generates over \$6 billion in positive economic impact annually; and

WHEREAS, protection of Florida’s coral reefs is essential for ensuring the continued protection of our shorelines, coastal food sources, cultural practices, biomedical opportunities, and coastal economies that are a direct result of our coral reefs; and

WHEREAS, it has been determined that coastal ocean waters are under great user pressure and suffer from water quality degradation that has compromised the resiliency of the Florida Reef Tract and its habitat; and

WHEREAS, the global threat and impacts to coral reefs continue to grow which, coupled with local stressors, is evidenced by coral reefs declining at an alarming rate; and

WHEREAS, this coral disease outbreak of unknown origin originated offshore of Miami-Dade County in fall 2014 and has persisted and continued to spread and affect new reefs from southwest of Key West in Monroe County to the northernmost coral reefs in Martin County, harming roughly 50 percent of the coral species present in the Florida Reef Tract; and

WHEREAS, the coral disease epidemic is causing near total mortality of vulnerable species present on the Florida Reef Tract, including reef-building coral species and species listed under the Endangered Species Act, resulting in an increasing threat to fragile ecosystems that support Florida's fisheries and protect our coasts; and

WHEREAS, a collaborative, multi-organizational/multi-disciplinary emergency response has formed to address this grave threat; and

WHEREAS, inaction will ensure near extinction of these susceptible species throughout the Florida Reef Tract; and

WHEREAS, the coral disease has spread from Florida to nine locations throughout the Caribbean, with the potential threat of introduction into the Pacific Ocean; and

WHEREAS, U.S. Senators Marco Rubio (R-FL) and Rick Scott (R-FL) and Representative Darren Soto (D-FL 9th) introduced the Restoring Resilient Reefs Act of 2019 designed to reauthorize and update the Coral Reef Conservation Act of 2000 to support the conservation of U.S. reefs, including through five years of directed federal funding, technical assistance to jurisdictions for coral reef management and restoration, and the codification of the U.S. Coral Reef Task Force; and

WHEREAS, establishing a long-term, recurring revenue source to provide adequate and flexible funding would provide dedicated resources to help find solutions necessary to protect the Florida Reef Tract; and

WHEREAS, the South Florida Regional Planning Council and the Treasure Coast Regional Planning Council wish to urge the Governor and Legislature to provide vital funding for the purposes specified below.

NOW, THEREFORE, BE IT RESOLVED BY THE SOUTH FLORIDA AND TREASURE COAST REGIONAL PLANNING COUNCILS THAT:

The Councils request that Florida's Governor and Legislature establish a long-term, recurring revenue source to provide adequate and flexible funding to support:

- 1) dedicated staff resources for coral reef disease intervention and restoration efforts;
- 2) infrastructure and capacity needed to maintain reproductive coral populations across the Florida Reef Tract;
- 3) infrastructure and capacity needed for assisted reproduction and propagation of resilient corals for future ecosystem restoration efforts;
- 4) in-water and land-based priority research focused on pathogen identification and disease treatment interventions;
- 5) restoration of coastal water quality through urban wastewater infrastructure upgrades; accelerated coastal septic to sewer conversions focused on local governments with matching fund programs; improved stormwater treatment; expedited closure of ocean wastewater outfalls; and additional strategies to greatly reduce nutrient loading from all human sources and pathways; and
- 6) a campaign to educate residents and tourists on the importance of their role in revitalizing this national natural resource, providing specific actions and challenges for reef users, non-users, business owners, elected officials, etc.

The Councils support new Federal legislation which should include the following:

- 1) measures which ensure effective, science-based protection and management of coral reefs;
- 2) codification of the United States Coral Reef Task Force;
- 3) increased funding, including an increase in direct funding of Jurisdictional Coral Reef Management Agencies; and
- 4) support for adaptive restoration activities.

DULY ADOPTED by the South Florida and Treasure Coast Regional Planning Councils this 25th day of October, 2019.

Greg Ross
Chair, SFRPC

Susan Adams
Chair, TCRPC