



MEMORANDUM

To: Council Members AGENDA ITEM 11

From: Staff

Date: October 12, 2018 Joint Council Meeting

Subject: Southeast Florida Coral Reef Tract - Update and Joint Resolution of Support – Joanna C. Walczak, Southeast Regional Administrator, Florida Coastal Office, Florida Department of Environmental Protection

Introduction

At their October 20, 2017 joint meeting, the Treasure Coast and South Florida Regional Planning Councils adopted Resolution TCSF #17-01 encouraging: 1) the establishment and management of the Southeast Florida Coral Reef Ecosystem Conservation Area (SFCRECA); 2) adequate state funding for water quality monitoring and coral disease response projects; and 3) the South Florida Water Management District (SFWMD) and Florida Department of Environmental Protection (FDEP) to employ additional strategies to greatly reduce nutrient loading to the nearshore reefs (Attachment 1).

Throughout the year, both Councils continued working on these initiatives with local, state, and federal agency staff and elected officials, and formed a 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 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. Originally confined north of Biscayne National Park, the disease has spread rapidly north to the St. Lucie Inlet in Martin County and south into the Keys National Marine Sanctuary in Monroe County. It has recently been found in the reefs off of Looe Key in the Lower Keys (Attachment 2). Experts agree this is the worst documented coral disease outbreak on the planet.

The stakes are high. Southeast Florida reefs support a rich and diverse assemblage of habitat that serve as essential spawning, nursery, breeding, and feeding grounds for numerous species of ecologic and economic importance. 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, coral reefs are the first line of defense for our beaches and coastal communities, providing important physical impact and flood reduction protection from severe and frequent tropical storm events. Coral reefs also manufacture some of the sand that supplies our beaches. The Florida Reef Tract comprises the only living nearshore coral reef ecosystem in the continental United States.

### Overview

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

- Council adopted a resolution supporting House Bill 1143 and Senate Bill 1624, which contain a \$2 million appropriation for FDEP (FY 17-18) to establish a special comprehensive water quality monitoring and disease response program for the Florida Reef Tract. The combined bills passed and have been signed by the Governor.
- This year, FDEP included a similar amount in their recent agency budget request to the legislature for FY 18-19 to continue the programs for the Florida Reef Tract. The request moved into the state budget, which was signed by the Governor.
- U.S. Environmental Protection Agency (EPA) provides \$1.7 million (FY 17-18) under its South Florida Geographic Initiative for additional water quality monitoring, reef management, disease response, and creation of a comprehensive Coral Disease Prevention and Response Plan for the Florida Reef Tract. Efforts were successful at the federal level to reauthorize and fund the 1992 South Florida Geographic Initiative. This EPA program has been a consistent source of funding for water quality monitoring and management for the Everglades, Florida Bay, Biscayne Bay, Indian River Lagoon, the Caloosahatchee Estuary, and the Florida Reef Tract.
- Late last year, the South Florida and Treasure Coast Regional Planning Councils passed Resolution TCSF #17-01 to support House Bill 53 and Senate Bill 232 to establish the SFCRECA to enhance opportunities for management efforts and funding for water quality monitoring and disease response. The combined bill sponsored by Representative Jacobs and Senator Book passed and was signed by the Governor authorizing the SFCRECA for waters/reefs offshore of Broward, Martin, Miami-Dade, and Palm Beach counties from the St. Lucie Inlet to the northern boundary of Biscayne National Park.
- With its first meeting held in January 2018, Treasure Coast and South Florida Regional Planning Councils established the Joint Committee on the South Florida Reef Tract to coordinate and organize efforts of local staff and elected officials with local, state, and federal partners involved in the fight to address the coral disease outbreak.

- The Councils organized a 75-minute session at Florida’s annual conference of the American Planning Association (APA) to promote a wider understanding of the dire condition of our nearshore coral reefs. The session entitled, “No Reef, No Treasure” was accepted by APA Florida and was held on September 14, 2018 at the Palm Beach County Convention Center.
- Efforts to reauthorize the Coral Reef Conservation Act of 2000 are moving forward at the federal level. This Act is intended to:
  - (1) preserve, sustain, and restore the condition of coral reef ecosystems;
  - (2) promote the wise management and sustainable use of coral reef ecosystems to benefit local communities and the nation;
  - (3) develop sound scientific information on the condition of coral reef ecosystems and the threats to such ecosystems;
  - (4) assist in the preservation of coral reefs by supporting conservation programs, including projects that involve affected local communities and nongovernmental organizations;
  - (5) provide financial resources for those programs and projects; and
  - (6) establish a formal mechanism for collecting and allocating monetary donations from the private sector to be used for coral reef conservation projects.
- 2018 is being recognized as the International Year of the Coral Reef.

### 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 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 (see Attachment 3).

### 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.

### Attachments

# ATTACHMENT 1



## RESOLUTION TCSF #17-01

**A JOINT RESOLUTION OF THE SOUTH FLORIDA AND TREASURE COAST REGIONAL PLANNING COUNCILS REPRESENTING THE LOCAL GOVERNMENTS OF MONROE, MIAMI-DADE, BROWARD, INDIAN RIVER, MARTIN, PALM BEACH, AND ST. LUCIE COUNTIES, FLORIDA, SUPPORTING HOUSE BILL 53 / SENATE BILL 232 ESTABLISHING THE SOUTHEAST FLORIDA CORAL REEF ECOSYSTEM CONSERVATION AREA; URGING THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION TO DEVELOP A MANAGEMENT PLAN; AND URGING THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT TO IMPLEMENT ADDITIONAL STRATEGIES TO GREATLY REDUCE NUTRIENT LOADING FROM ALL HUMAN SOURCES AND PATHWAYS AS A MATTER OF URGENCY**

**WHEREAS**, economically and ecologically valuable nearshore coral reef resources are found in Florida coastal waters from Martin County to the Dry Tortugas in Monroe County and comprise the Florida Reef Tract – the only coral reef tract in the continental United States (Exhibit A); and

**WHEREAS**, the Southeast Florida Coral Reef Tract stretches from Miami-Dade County (north of Biscayne National Park) to St. Lucie Inlet in Martin County and comprises one third of the 360-mile long Florida Reef Tract; and

**WHEREAS**, coral reefs are the literal first line of defense for our beaches and coastal communities, providing invaluable physical impact and flood reduction protection from increasingly severe and frequent tropical storm events; and

**WHEREAS**, coastal waters, coral reefs, and the aquatic life they support are essential in sustaining over 71,000 jobs and contributing over \$6 billion to Florida's economy while serving approximately 6 million residents and over 38 million visitors annually; and

**WHEREAS**, the Florida Keys portion of the Florida Reef Tract is recognized and protected by management plans of the National Marine Sanctuary, National Parks, and National Wildlife Refuges; however, the Southeast Florida Coral Reef Tract remains unprotected and without a state-adopted management plan addressing its future sustainability; and

**WHEREAS**, the highly-accessible Southeast Florida Coral Reef Tract has experienced impacts from extremely high usage year-round and from water quality degradation caused by numerous factors including: prolonged periods of exceptionally warm water temperatures, acidification; and from direct human inputs such as: excessive and prolonged stormwater discharge events and the continued operation of ocean outfalls and septic systems; and

**WHEREAS**, disease outbreaks are occurring along the entire Florida Reef Tract that have quickly spread and include multiple diseases which have impacted over 21 species of reef-building stony corals, including

several listed as threatened under the U.S. Endangered Species Act and the State Imperiled Species Management Plan; and

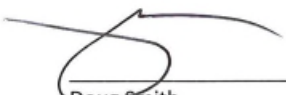
**WHEREAS**, the Treasure Coast and South Florida Regional Planning Councils ("RPCs") recognize the value of the entire Florida Reef Tract and its important contribution to the region's economy and ecology; and

**WHEREAS**, the RPCs desire to support and advance the protection and restoration of the Florida Reef Tract.

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

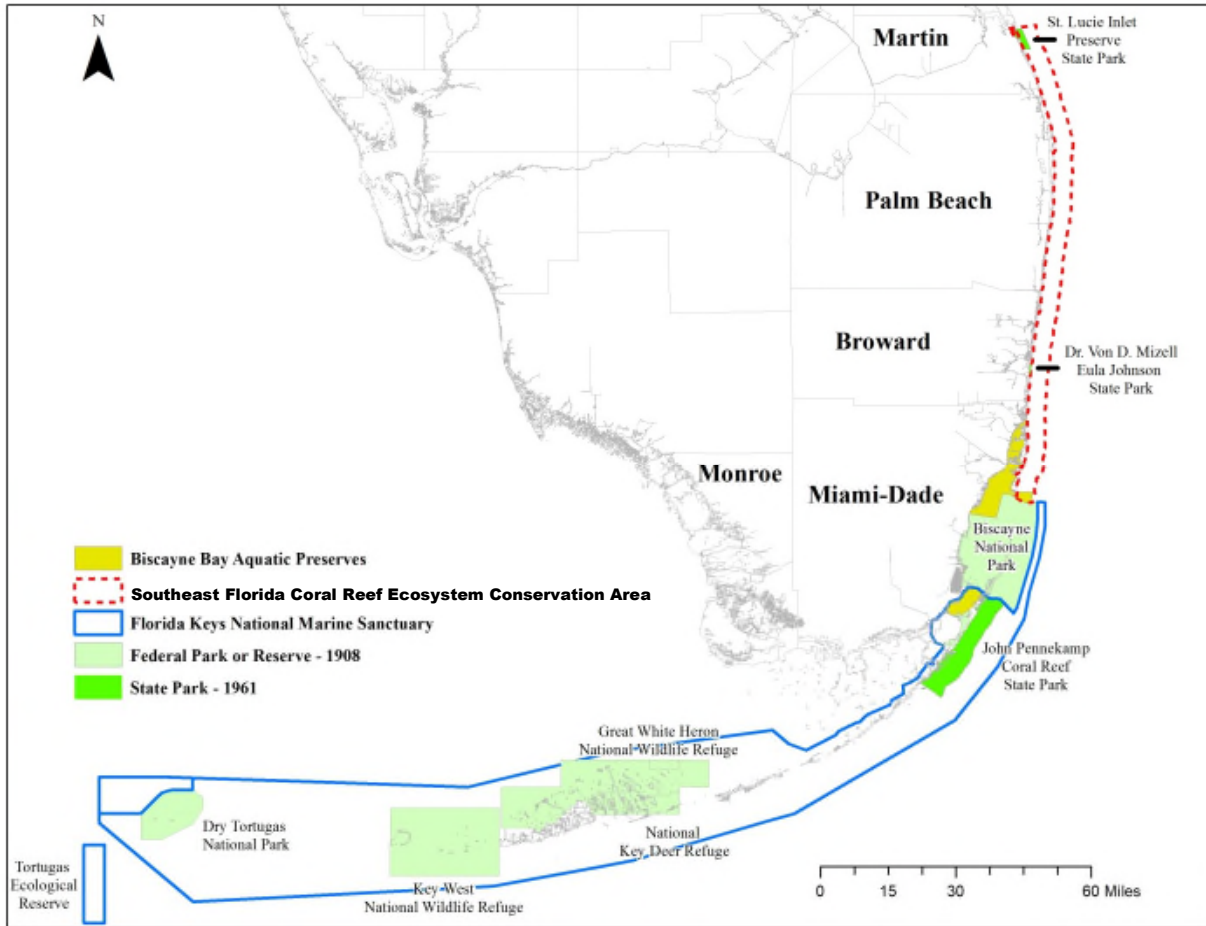
- 1) Endorse and support House Bill 53 / Senate Bill 232, establishing the boundaries of the Southeast Florida Coral Reef Ecosystem Conservation Area, and urge responsible agencies, including the Florida Department of Environmental Protection ("FDEP") Coral Reef Conservation Program to develop a Southeast Florida Coral Reef Ecosystem Management Plan for the purpose of mitigating reef diseases, and water quality impacts, while maintaining a healthy and sustainable Southeast Florida Coral Reef Tract; and
- 2) Urge the FDEP and the South Florida Water Management District to develop and implement strategies to greatly reduce nutrient loading from all human sources and pathways as a matter of urgency, including surface water management initiatives of the Comprehensive Everglades Restoration Plan and Central Everglades Planning Project; and
- 3) Encourage FDEP to establish, at a minimum, a recurring annual agency budget request of \$1 million for the purpose of water quality monitoring and coral disease response and mitigation for the Florida Reef Tract; and
- 4) That this Resolution shall take effect immediately upon adoption hereof.

**DULY ADOPTED** by the Treasure Coast and South Florida Regional Planning Councils this 20<sup>th</sup> day of October, 2017.

  
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Doug Smith  
Chairman, TCRPC

  
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Tim Daubert  
Chairman, SFRPC

# EXHIBIT A



## ATTACHMENT 2



### 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:

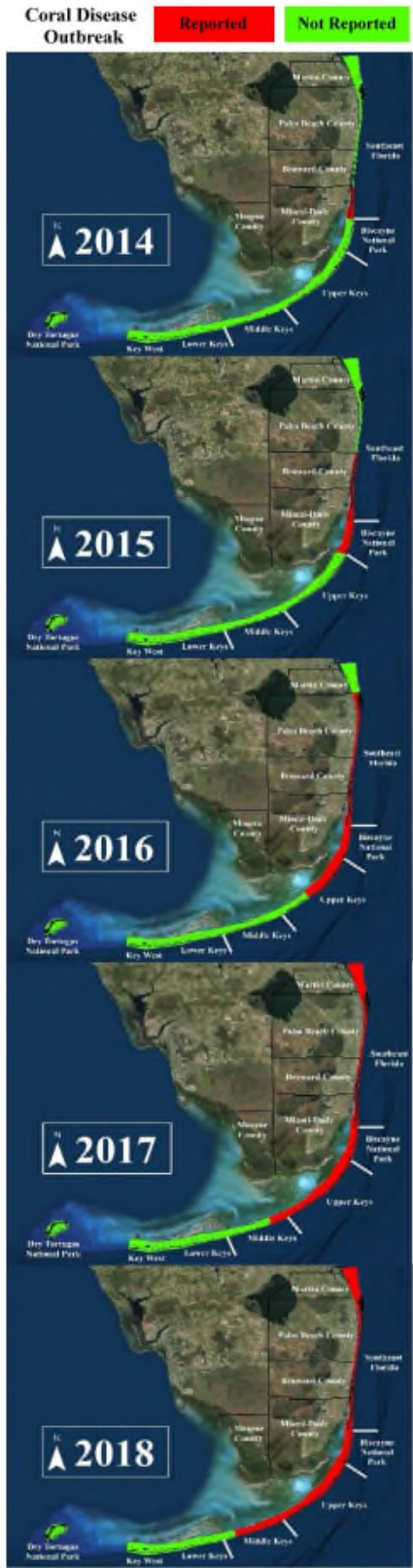
- **Coral disease investigation training** on coral disease identification, ecology and investigation techniques.
- **Coral disease surveys and fixed site monitoring** to document the spatial extent, mortality rates and species-specific impacts.
- **Strategic sampling and laboratory analysis** to identify 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](http://www.floridadep.gov/fco/coral/content/florida-reef-tract-coral-disease-outbreak)



v5.17



Coral Disease Outbreak on  
the Florida Reef Tract  
2014-2018

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





**RESOLUTION TCSF #18-04**

**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**

**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, and provides a vital marine habitat for over 6,000 species; 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**, 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 the lower Florida Keys in Monroe County to the northernmost coral reefs in Martin County, harming more than 50 percent of the coral species present in the Florida Reef Tract; and

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

**WHEREAS**, a collaborative, multi-agency/multi-disciplinary emergency response team of experts is essential to address this condition; and

**WHEREAS**, inaction will ensure near extinction of these susceptible species throughout the Florida Reef Tract and allow disease entry into the wider Caribbean; 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 JOINTLY BY THE SOUTH FLORIDA REGIONAL PLANNING COUNCIL AND THE TREASURE COAST REGIONAL PLANNING COUNCIL 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) in-water and land-based priority research focused on pathogen identification and disease treatment interventions;
- 4) 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
- 5) marketing 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.

**DULY ADOPTED** by the South Florida and Treasure Coast Regional Planning Councils this 12<sup>th</sup> day of October, 2018.

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Frank Caplan  
Chair, SFRPC

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Reece J. Parrish  
Chair, TCRPC