



MEMORANDUM

AGENDA ITEM #IV.E

DATE: FEBRUARY 26, 2017

TO: COUNCIL MEMBERS

FROM: STAFF

SUBJECT: CORAL REEF CONSERVATION PROGRAM INITIATIVE

At its October 20, 2017 joint meeting, the South Florida and Treasure Coast 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).

Both Councils are continuing to work on these initiatives with local, state, and federal agency staff and elected officials, recently forming a Joint Committee on the Southeast Florida Coral Reef Tract. With this memorandum, Council staff seeks to update Council on continuing efforts and to request authorization to continue work on these initiatives with federal, state, and local partners.

Background

At its April 24, 2017 meeting, Council received a presentation from FDEP officials regarding a significant coral disease outbreak and the dire condition of the Southeast Florida Coral Reef Tract (SFCRT) between the St. Lucie Inlet in Martin County and Biscayne National Park in Miami-Dade County. Originally confined north of Biscayne National Park, the disease has spread rapidly south into the Florida Reef Tract and Keys National Marine Sanctuary, and has recently been found in the reefs off Marathon in the Middle Keys (Attachment 2).

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 literal first line of defense for our beaches and coastal communities, providing important physical impact and flood reduction protection from severe and frequent tropical events. Coral reefs also manufacture some of the sand that supplies our beaches. Together, the Florida and Southeast Florida reef tracts comprise 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 include the following:

- House Bill 1143 (Jacobs) and Senate Bill 1624 (Farmer) fail to pass but the Legislature appropriates \$1 million for water quality monitoring and disease response program for the Southeast Florida Coastal Reef Tract (Line item 1620 in SB 2500, General Appropriations Act). FDEP includes a similar amount in their agency budget request to the Legislature for FY 18-19 to continue the programs for the SFCRT.
- 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 to create a comprehensive Coral Disease Prevention and Response Plan for the Florida Reef Tract.
- In October 2017, the South Florida and Treasure Coast Regional Planning Councils pass Resolution TCSF #17-01 in support of House Bill 53 and Senate Bill 232 to establish the Southeast Florida Coral Reef Tract as the Southeast Florida Coral Reef Ecosystem Conservation Area to enhance opportunities for management efforts and funding for water quality monitoring and disease response. On February 7, 2018 the combined bills were passed by the Legislature and are on their way to the Governor's office.
- On January 24, 2018, SFRPC Councilmember Furr and TCRPC Councilmember Smith jointly convene a staff workgroup meeting to discuss issues related to the Southeast Florida Coral Reef Tract. Action items are identified including the need to have the South Florida and Treasure Coast Regional Planning Councils establish the SFRPC - TCRPC Joint Committee on the Southeast Florida Coral 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.
- Efforts to reauthorize and fund the 1992 South Florida Geographic Initiative are underway at the federal level. 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. Funding has been zeroed-out in the most recent budget proposal from the President.
- Efforts to reauthorize the Coral Reef Conservation Act of 2000 are underway 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.
 - Ocean Day in Tallahassee was held on February 12-13, 2018.

Conclusion

The coral reef disease outbreak is seriously degrading and jeopardizing the entire nearshore reef ecosystem within the five-county area between Monroe and Martin counties. It is spreading rapidly and requires aggressive, coordinated action. The Councils can provide useful education, coordination, and support functions to guide the regional resources needed to solve the problem.

Recommendation

Authorize establishment of a Joint SFRPC -TCRPC Committee on the Southeast Florida Coral Reef Tract Council, co-chaired by Councilmember Furr and Councilmember Smith, and supported by staff, to continue outreach, coordination, and advocacy efforts related to conservation and management of the Florida Reef Tract.

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.

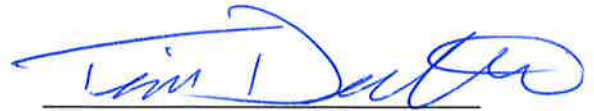
NOW, THEREFORE, BE IT RESOLVED JOINTLY BY THE SOUTH FLORIDA AND TREASURE COAST REGIONAL PLANNING COUNCILS, THAT THEY:

- 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 20th day of October, 2017.



Doug Smith
Chairman, TCRPC



Tim Daubert
Chairman, SFRPC



Florida Reef Tract Coral Disease Outbreak

The Florida Reef Tract is currently experiencing one of the most widespread and lethal coral disease outbreaks on record worldwide.

Key factors of the outbreak include:

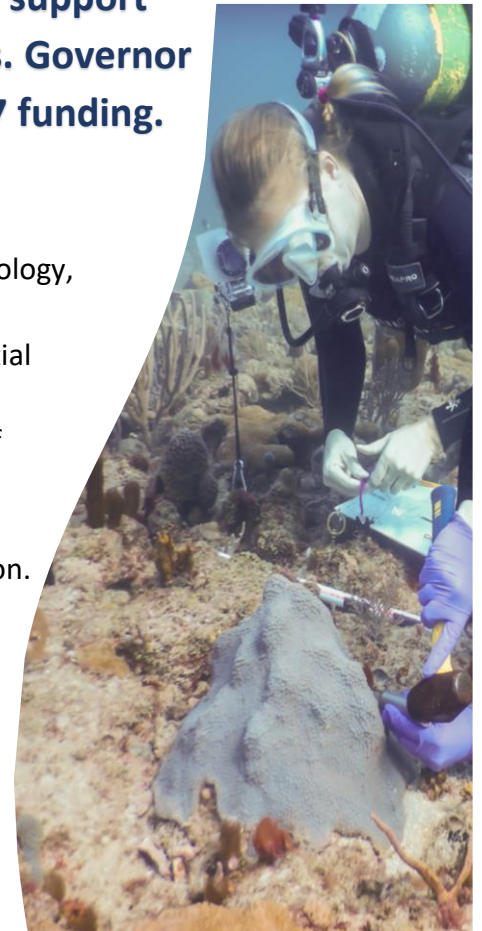
- **Large geographic range.** Over half of the Florida Reef Tract has been affected.
- **Duration of the outbreak.** Disease has continued to spread for over three years without interruption.
- **Number of coral species affected.** 23 of 45 species of Florida's reef-building corals have been affected.
- **High rates of disease transmission and mortality.** Once a coral is infected, observations show that the colony will die within weeks to months.



In FY 17, the Florida Legislature allocated \$1 Million to support Florida's coral reefs, including disease response activities. Governor Scott's FY 18 budget recommends continuation of FY 17 funding.

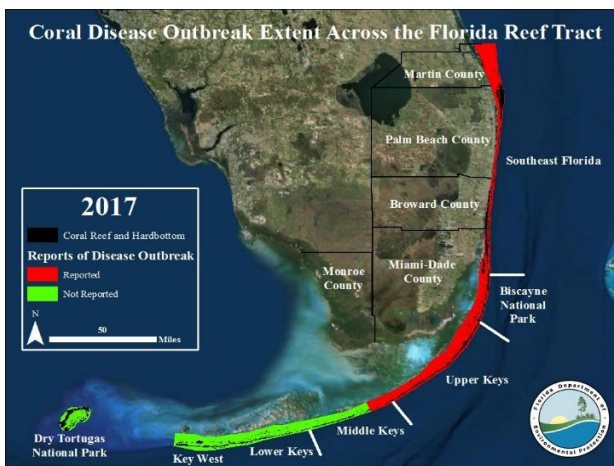
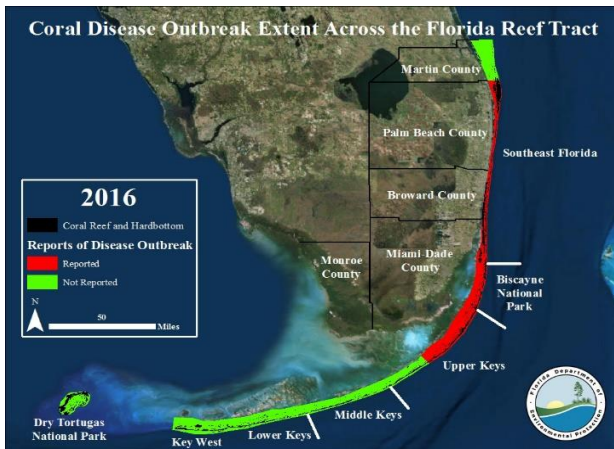
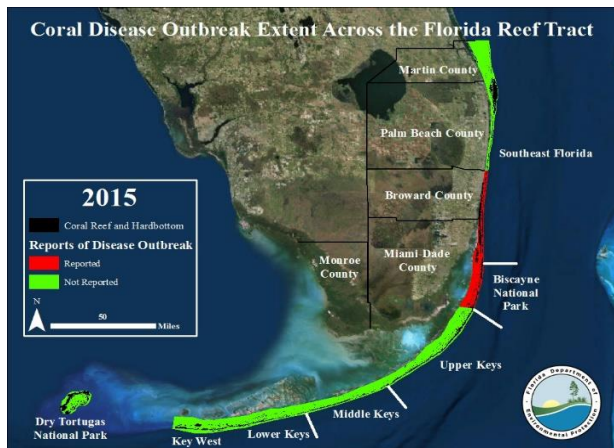
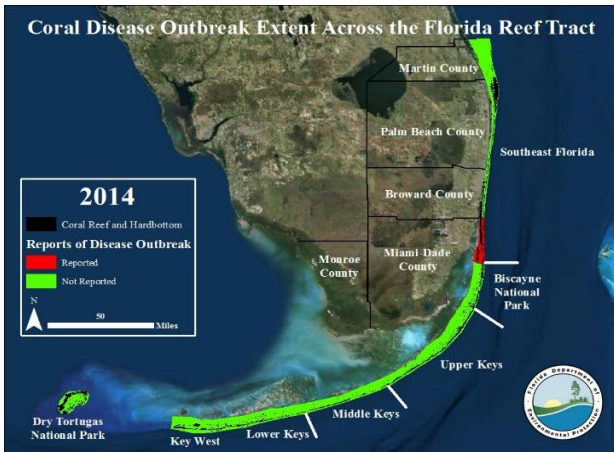
Priority coral disease response activities include:

- **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



Coral Disease Outbreak on the Florida Reef Tract 2014 - 2017

The loss of coral colonies across the Florida Reef Tract is unprecedented.

Key factors are high rates of disease transmission and mortality combined with the number of impacted species.

Funding to date is being used to assess the scale and severity of the outbreak, and identify any potential primary and/or secondary causes.

In FY 17, the Florida Legislature allocated \$1 Million to support Florida's coral reefs, including disease response activities.

Governor Scott's FY 18 budget recommends continuation of FY 17 funding.

The alarming rate of continued spread of disease requires immediate field trials of intervention techniques to identify the most effective treatments for saving remaining coral colonies across the Florida Reef Tract.