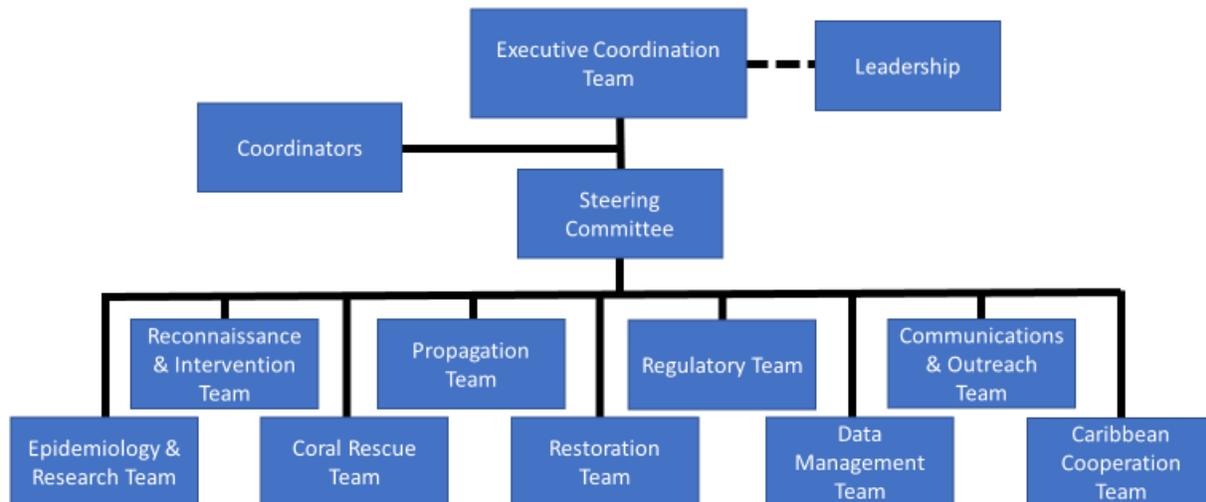


## Florida Stony Coral Tissue Loss Disease Response

### Purpose

This document outlines the general responsibilities of the Executive Coordination Team, Steering Committee, Response Teams, and Coordinators for Florida’s Stony Coral Tissue Loss Disease response. Below is the general organizational chart:



### Background

Corals of the Florida Reef Tract have been experiencing an outbreak of Stony Coral Tissue Loss Disease (SCTLD). First reported off the coast of Miami-Dade County in 2014, the SCTLD outbreak now spans nearly the entire reef tract. SCTLD impacts roughly half of Florida’s 45 stony corals, including key reef building species, five species listed pursuant to the Endangered Species Act, and many iconic coral species. SCTLD has high species-specific prevalence rates and whole-colony mortality rates, leading to significant declines of susceptible species on impacted reefs. SCTLD outbreaks have now also been reported across the Caribbean.

Due to the severity and longevity of this coral disease outbreak, a response has coalesced among management authorities, researchers, conservation practitioners, non-governmental organizations, veterinarians, and engaged citizens. Roughly 60 partner organizations participate in nine Response Teams, each focused on a different priority topic area. The response is led by two bodies: a Steering Committee and an Executive Coordination Team.

### Leadership Body Membership

The two SCTLD leadership bodies are comprised of one member each from the Florida Department of Environmental Protection (DEP), Florida Fish and Wildlife Conservation Commission (FWC), National Oceanic and Atmospheric Administration’s (NOAA) Coral Reef Conservation Program (CRCP), NOAA Florida Keys National Marine Sanctuary (NOAA FKNMS), and National Park Service (NPS).

Agency	Steering Committee	Executive Coordination Team
DEP	Joanna Walczak	Joanna Walczak (acting)
FWC	Caroline Gorga	Gil McRae
NOAA CRCP	Dana Wusinich-Mendez	Jennifer Koss
NOAA FKNMS	Andy Bruckner	Sarah Fangman
NPS	Anna Toline	Erik Stabenau

### Leadership Body Responsibilities

The purpose of the **Executive Coordination Team** is to cooperatively provide guidance on high-level response objectives and resource needs and to engage with Agency leadership. Specific responsibilities include:

- Engaging with Agency leadership and ensuring two-way communication on current response direction and needs
- Engaging with the Steering Committee where appropriate, (e.g., requesting summary documents or briefing materials)
- Providing final approval for response documents (e.g., Strategic Action Plan, Leadership Asks, etc.)
- Providing guidance on overall funding portfolio
- Identifying and securing new funding opportunities for short and long-term response activities
- Actively pursuing opportunities to support response capacity needs
- Serving as the final venue for conflict resolution for issues within/between Response Teams
- Collaborating to reduce local stressors to the ecosystem

The purpose of the **Steering Committee** is to cooperatively provide guidance on the day-to-day operations of Florida's SCTL D response. Specific responsibilities include:

- Engaging with Team Leads and response partners
- Providing any necessary context or information to respective Executive Coordination Team members
- Elevating issues to the Executive Coordination Team, as appropriate and necessary
- Developing response documents (e.g., Strategic Action Plan, Leadership Asks, etc.)
- Recommending project-specific funding
- Assisting in project development
- Serving as the initial venue for conflict resolution for issues within/among Response Teams
- Coordinating with other bodies, committees, and projects (e.g. Coral Restoration Consortium, Mission Iconic Reefs, Florida Reef Resilience Program, monitoring programs, etc.) on activities that may affect disease response

### **Coordination**

Coordination for the SCTL D response is led by a Coral Disease Response Coordinator ('Coordinator') in collaboration with Florida's National Coral Reef Management Fellow ('Coral Fellow'). The Coordinator is responsible for organizing and facilitating meetings of the leadership bodies, working to align Response Team activities toward overarching response goals, and ensuring effective collaboration and communication throughout the response. The Coral Fellow is responsible for organizing and facilitating meetings of the Disease Advisory Committee, knowledge management related to technical activities of the response, and leading coordination of the annual SCTL D Technical Workshop.

The Coordinator and Coral Fellow are each 'Primary' for certain Response Teams or bodies. The responsibility of the Primary is help synthesize and track important information from their Teams (including, but not limited to, major accomplishments, needs of the teams, major products under development, etc.). As appropriate and necessary, the Primary will support Team Leads in their duties.

Coordinator: Maurizio Martinelli (FSG)

Coral Fellow: Victoria Barker (NSU/NOAA FKNMS)

### **Response Teams**

There are currently nine response teams, each focused on a priority topic area. Brief descriptions of each Response Team, team co-leads, the Primary coordinator, key personnel, and links to relevant materials are included below.

### **Research & Epidemiology Team**

The Research & Epidemiology Team is responsible for identifying the overarching research needs related to the current coral disease outbreak and working collaboratively to begin addressing the research gaps. The Research & Epidemiology Team will review all research project proposals and reports. The Research & Epidemiology Team is sub-divided into four

specific research areas: (1) Histopathology; (2) Pathogen Identification & Microbiome Characterization; (3) Coral Immune Health & “-omics”; and (4) Environmental Factors & Transmission.

Co-leads: Andy Bruckner (NOAA FKNMS) and Cheryl Woodley (NOAA NCCOS)

Primary Coordinator: Victoria Barker

Additional key personnel: Samantha Cook (GMU), Histopathology lead; Christina Kellogg (USGS) and Stephanie Rosales (CIMAS), Pathogen Identification & Microbiome Characterization leads; Nikki Traylor-Knowles (UM) and Frank Mari (NIST), Coral Immune Health & “-omics” co-leads; and Greta Aeby (QU), Environmental Factors and Transmission lead.

Team Materials: <https://floridadep.gov/rcp/coral/content/research-and-epidemiology-team>

### **Reconnaissance & Intervention Team**

The Reconnaissance & Intervention Team is a dual-pronged team that focuses heavily on in-water work. On the reconnaissance side, the Team is responsible for the efforts to identify, track, and map the leading edge of the disease front. In addition, the Reconnaissance & Intervention Team may assist in reconnaissance within the endemic zone, including identifying areas of high survivorship. On the intervention side, the Team is responsible for identifying sites and colonies within the invasion, epidemic, and endemic zones for treatment, and for developing relevant protocols and decision-making tools. The Reconnaissance & Intervention Team will, where possible, work to identify novel treatments or improve existing treatment methodologies.

Co-leads: Karen Neely (NSU), Intervention lead; and Stephanie Schopmeyer (FWC FWRI), Reconnaissance lead

Primary Coordinator: Victoria Barker

Team Materials: <https://floridadep.gov/rcp/coral/content/reconnaissance-and-intervention-coral-disease-response-team>

### **Coral Rescue Team**

The Coral Rescue Team is leading an ambitious conservation effort to ‘rescue’ unaffected coral colonies in advance of the disease margin with the goals of gene-banking and providing parent colonies for future restoration efforts. The Coral Rescue Team is responsible for the development of coral collection and housing plans, targeting appropriate genetic diversity for future propagation and restoration efforts. The Coral Rescue Team collaborates closely with the Association of Zoos and Aquariums (AZA) to place coral ‘reefugees’ in aquarium facilities across the country while partners in Florida build the infrastructure, capacity, and expertise to house and propagate the corals. In the development of their Florida Reef Tract Rescue Project (FRTRP), AZA partners have helped develop facility requirements, coral husbandry guidelines, and monitoring regimen for the long-term care of these corals.

Co-leads: Lisa Gregg (FWC) and Jennifer Moore (NOAA NMFS)

Primary Coordinator: Maurizio Martinelli

Additional key personnel: Beth Firchau (AZA), FRTRP Coordinator

Team Materials: <https://floridadep.gov/rcp/coral/content/coral-rescue-team>

Coral Rescue Dashboard:

<http://myfwc.maps.arcgis.com/apps/opsdashboard/index.html#/eba7dc2cab64f60819e6d4b084d94cd>

### **Propagation Team**

The Coral Propagation Team is responsible for the development of a strategy for the sexual, asexual, and sexual-to-asexual propagation of corals for restoration of Florida’s corals. The strategy will consider infrastructure development or expansion, species-specific goals, and genetic management plans, among others. As there is expertise across the globe that can benefit the efforts here in Florida, the Coral Propagation Team will serve as a coordinating hub that can assist with funding requests and facilitate communication across all propagation partners.

Co-leads: Lisa Gregg (FWC) and Jennifer Moore (NOAA NMFS)

Primary Coordinator: Maurizio Martinelli

Additional key personnel: Beth Firchau (AZA), FRTRP Coordinator

Team Materials: <https://floridadep.gov/rcp/coral/content/coral-propagation-team>

### **Restoration Team**

Florida has been a focus of extensive active coral propagation and coral reef restoration over the past decade. In response to the severity of this epizootic, restoration practitioners in Florida have either paused or curtailed the restoration of the susceptible coral species until a better understanding of the disease dynamics emerges. The Restoration Team is responsible for developing, conducting, and/or coordinating outplanting trials to help determine when and where coral restoration should occur. The Restoration Team developed the following three guiding questions: (1) are acroporid corals susceptible to or a potential vector of SCTLD?; (2) will outplant sites of SCTLD-susceptible coral species serve as a new source of disease flare-ups or increase the severity of the outbreak in the surrounding coral community?; and (3) can SCTLD-susceptible species be outplanted on the Florida Reef Tract with acceptable survival rates to warrant attempting coral restoration efforts on a larger scale?

Co-leads: Kristi Kerrigan (FDEP) and Erinn Muller (Mote)

Primary Coordinator: Maurizio Martinelli

Team Materials: <https://floridadep.gov/rcp/coral/content/restoration-trials-team>

### **Data Management Team**

The Data Management Team is responsible for understanding each team's data needs and availability, and ensuring that relevant data are organized, transparent, synthesized, and made available to all partners in a timely manner. The Data Management Team will assist in data visualization where appropriate.

Co-leads: Nick Alcaraz (FWC FWRI) and Rene Baumstark (FWC FWRI)

Primary Coordinator: Victoria Barker

Team Materials: TBD

### **Communications & Outreach Team**

The Communications & Outreach Team is responsible for advancing all forms of communications surrounding the coral disease outbreak, both to response partners and the general public. The Communications & Outreach Team works to produce communications products and pieces, working with other teams to review products, and developing and coordinating unified messaging among partners. The Communications and Outreach Team aims to enhance community understanding, participation, and local stewardship in a coordinated response to the ongoing coral disease outbreak through education and training to improve capacity to participate in monitoring and management programs. In addition, the Communications & Outreach Team has developed and implemented a citizen science program that trains local divers to identify corals, determine coral health, and report SCTLD to managers.

Co-leads: Michelle Gaulty (DEP), Shelly Krueger (FSG), and Gena Parsons (NOAA FKNMS)

Primary Coordinator: Maurizio Martinelli, Victoria Barker

Team Materials: <https://floridadep.gov/rcp/coral/content/communications-and-outreach-team>

### **Regulatory Team**

The Regulatory Team is responsible for coordinating the issuance of permits for response activities underway in the various jurisdictions, ensuring the regulatory compliance of response activities, and considering whether there are needs to enhance capacity for processing requests for new response activities. In addition, the Regulatory Team has been considering means to incorporate SCTLD response activities into mitigation requirements for large-scale coastal construction projects.

Co-leads: Joanne Delaney (NOAA FKNMS), Lisa Gregg (FWC), and Jocelyn Karazsia (NOAA NMFS)

Primary Coordinator: Victoria Barker

Team Materials: <https://floridadep.gov/rcp/coral/content/regulatory-team>

### **Caribbean Cooperation Team**

The Caribbean Cooperation Team is responsible for facilitating communication between Florida response partners and individuals in other coral reef jurisdictions in the Caribbean. The Team is also responsible for tracking reports of similarly appearing disease signs outside of Florida, properly disseminating any new information (e.g., new intervention techniques, research findings) to and from other jurisdictions, and facilitating learning exchanges.

Co-leads: Jennifer Koss (NOAA CRCP), Judy Lang (AGRRA), and Dana Wusinich-Mendez (NOAA CRCP)

Primary Coordinator: Maurizio Martinelli

Team Materials: <https://floridadep.gov/rcp/coral/content/caribbean-cooperation-team>

Caribbean-wide portal: <https://www.agrra.org/coral-disease-outbreak/>