



NOAA Strategy for Stony Coral Tissue Loss Disease: An Implementation Plan for Response and Prevention



The *NOAA Strategy for Stony Coral Tissue Loss Disease (SCTLD): An Implementation Plan for Response and Prevention* aims to:

- Build on goals and agency priorities identified in the NOAA Strategy for SCTLD Response and Prevention
- Outline a detailed, five-year course of action for SCTLD response and prevention
- Match agency capacity with SCTLD response needs and compliment and enhance the efforts of our partners
- Highlight key actions necessary to understand and address this new threat to coral reefs over the long-term

An Unprecedented Threat

Atlantic-Caribbean coral reef ecosystems are in the midst of an unprecedented outbreak of stony coral tissue loss disease (SCTLD). Characterized by rapid spread, rapid tissue loss, and high mortality rates, SCTLD has affected corals along the entirety of Florida's Coral Reef and in 22 Caribbean countries and territories, including the U.S. Virgin Islands and Puerto Rico. SCTLD is rapidly reducing coral cover in a region already dealing with declining coral reefs. The disease's persistence in affected areas and continued spread represents one of the most important threats currently facing America's coral reefs.

A Strategy for Action

In 2020, NOAA published its *Strategy for Stony Coral Tissue Loss Disease Response and Prevention* to help guide an agency-wide response to SCTLD. The Strategy provides a framework for NOAA engagement in regional response efforts in currently affected areas and support for preventative action to limit disease spread.

The implementation plan outlines a detailed course of action for SCTLD response and prevention activities for the next five years. Recognizing that SCTLD will likely be present on U.S. coral reefs for the foreseeable future, the implementation plan also outlines key actions necessary to address this new threat over the long-term. The implementation plan includes both areas for continued effort and new activities that may be carried out by either NOAA or other governmental and nongovernmental partners.

Securing Support

Following the publication of the plan, NOAA and partners will work to secure funding for its implementation, with NOAA-led projects implemented through NOAA's Coral Reef Conservation Program and partner-led projects supported via grants and external funding. It is anticipated that the majority of funds called for to support this plan will be allocated to external partners via grants. An estimated \$125 million will be required over five years to fully execute the implementation plan.

For the full plan: https://www.coris.noaa.gov/activities/stony_coral_tissue_loss_disease/, click on the Implementation Plan.



GOALS AND PRIORITY ACTIVITIES

The plan includes 52 activities addressing eight goals. Priority activities that are most critical for combating threats posed by SCTLD were identified for each goal area. These priorities will be funded and implemented first.

Goal 1: Expand capacity for research and data collection on SCTLD

- Research audit and synthesis
- SCTLD transmission experiments
- Identification of causation and diagnostic development
- Evaluating the susceptibility of Pacific corals

Goal 2: Build capacity for coral disease detection, prevention, and intervention

- SCTLD preparedness in the U.S. Indo-Pacific
- Pacific preparedness workshops and trainings
- Preparedness and surveillance planning—unaffected jurisdictions
- Monitoring and surveillance for SCTLD in affected and unaffected jurisdictions
- Treatment and intervention in affected jurisdictions
- National coral disease coordination capacity

Goal 3: Support coral rescue, propagation, and restoration operations and research and partnerships across the U.S. to preserve the genetic diversity of corals necessary for future restoration efforts and support reef health

- Coral rescue coordinator
- Establishment of land-based coral nurseries

Goal 4: Promote awareness of SCTLD science, status, and indicators

- National SCTLD communications strategy
- U.S. Coral Reef Task Force Coral Disease Working Group

Goal 5: Collaborate with the coral reef management community to reduce stressors to coral reefs and build ecosystem resilience

- Integrating coral disease into restoration plans

Goal 6: Use the Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act and Section 7 Endangered Species Act consultations to ensure SCTLD is evaluated as part of the baseline environmental conditions, in addition to environmental consequences and cumulative impacts that may result from federal actions

- Standard operating procedures for SCTLD monitoring before and during coastal development activities

Goal 7: Strengthen and expand international partnerships for SCTLD surveillance and sharing of data, best practices, and resources

- SCTLD training and technical assistance for the international Caribbean

Goal 8: Work with relevant partners to prevent the spread of SCTLD to the four U.S. coral reef jurisdictions and Freely Associated States in the Indo-Pacific region

- Ballast water best management practices
- Building partnerships for ballast water management

Lead authors: Caroline McLaughlin, Florida Sea Grant and Dana Wusinich-Mendez, NOAA Coral Reef Conservation Program. https://www.coris.noaa.gov/activities/stony_coral_tissue_loss_disease/ To develop the implementation plan, NOAA assembled a Core Planning Team of agency experts, diverse in both their geographic focus, technical capabilities, and experience. It was reviewed by a broader group of NOAA colleagues, external partners, and the U.S. Coral Reef Task Force Coral Disease Working Group. Published 04/12/2023.

Front page photos: left—applying antibiotic paste to diseased coral head; right—collecting targeted coral species for future outplanting. Photo credits: Blake Gardner (left) and Joe Synder (right).