



Introduction



In the United States, coral reef resources provide economic and environmental benefits to millions of people in the form of food, jobs, natural products, pharmaceuticals, and shoreline protection. They help communities prevent coastal erosion and the fish species they sustain are a critical source of revenue for the Nation's fishermen. The intrinsic beauty of coral reefs and their spectacular biodiversity, attract thousands of tourists each year, which makes tourism the top industry in many coral reef areas. Perhaps most important, the biodiversity found in the Nation's coral reef ecosystems may hold the key to significant medical discoveries.

Coral reef ecosystems have survived for millions of years despite an abundance of natural disturbances. However, natural stressors are now being compounded by impacts from people including pollution, overfishing, physical damage, and contributions to climate change. A combination of stressors has caused a rapid decline in the health of many coral reef ecosystems globally, and, left unchecked, this decline could lead to significant social, economic, and environmental consequences.

In response to this growing crisis, Executive Order 13089 (1998) established the United States Coral Reef Task Force (USCRTF) to coordinate efforts to protect, restore, and sustain coral reef ecosystems. The USCRTF—composed of 12 federal agencies, 7 state and territory partners, and 3 non-voting Freely Associated States—is directed to oversee implementation of the policy and federal agency responsibilities set forth in the Executive Order and to guide and support activities under the U.S. Coral Reef Initiative. USCRTF duties range from planning and priority setting to assisting and coordinating member activities.

Since its inception, the USCRTF has been an important catalyst for federal, state, territory, and local action. By increasing collaboration among federal, state, territory, and local agencies; nongovernmental institutes and organizations; and international partners, the USCRTF has maximized limited funding and resources through joint planning and priority setting, leading to many of the activities that have benefited coral reefs over the past few years. With input from a wide variety of groups and interests, the USCRTF has led efforts to identify key threats



The U.S. National Coral Reef Action Strategy's 13 Goals for Addressing Threats to Coral Reefs Worldwide

Theme 1: Understand Coral Reef Ecosystems—

Better understanding of complex coral reef ecosystems will improve management and conservation of these valuable resources. The Strategy outlines the following major goals to increase understanding of coral reef ecosystems:

Goal 1: Create comprehensive maps of all U.S. coral reef habitat.

Goal 2: Conduct long-term monitoring and assessments of reef ecosystem conditions.

Goal 3: Support strategic research to address the major threats to reef ecosystems.

Goal 4: Increase understanding of the social and economic factors of conserving coral reefs.

Theme 2: Reduce the Adverse Impacts of Human Activities—

Reducing the impacts of human activities is essential to conserving coral reef ecosystems. The

Strategy outlines the following major goals to reduce the adverse impacts of human activities:

Goal 5: Improve the use of marine protected areas to reduce threats.

Goal 6: Reduce adverse impacts of fishing and other extractive uses.

Goal 7: Reduce impacts of coastal uses.

Goal 8: Reduce pollution.

Goal 9: Restore damaged reefs.

Goal 10: Improve education and outreach.

Goal 11: Reduce threats to coral reef ecosystems internationally.

Goal 12: Reduce impacts from international trade in coral reef species.

Goal 13: Improve coordination and accountability.



to U.S. coral reef ecosystems (see table 1) and to develop local and national action strategies addressing these threats. USCRTF member agencies and their partners have, in turn, coordinated efforts to carry out these actions.

USCRTF developed the *National Action Plan To Conserve Coral Reefs* (2000) in response to Executive Order 13089. The Plan serves as a blueprint to counteract the continued destruction of coral reef ecosystems and identifies 2 overarching themes and 13 goals with related objectives outlining the main threats to coral reef ecosystems and key actions to help reduce these threats. NOAA, in cooperation with the USCRTF, published *A National Coral Reef Action Strategy* (2002), as required by the Coral Reef Conservation Act

(CRCA), Pub. L. No. 106–562; 16 U.S.C. § 6401 *et seq.* The Strategy is based on the framework presented in the Plan and provides information on the major threats and needs in each jurisdiction, tracks progress in achieving USCRTF goals and objectives, and identifies priority actions needed to achieve the goals and objectives.

Starting two years after the publication of the Strategy and every 2 years thereafter, CRCA requires NOAA to submit a report describing all activities undertaken to implement the Strategy, including a description of the funds obligated each fiscal year to advance coral reef conservation. This report, *Implementation of the National Coral Reef Action Strategy*, fulfills this requirement and includes highlights of the full range of USCRTF

Table 1: Ranking of Major Threats to Coral Reef Ecosystems by Region

This table is a general summary of the relative impact of natural and human-related threats to coral reef ecosystems in the United States and Freely Associated States in 2002 and 2004, based on expert opinion of coastal managers within the jurisdictions. These threat levels may vary over time to reflect changes in natural and anthropogenic impacts or to incorporate new information about impacts.

Perceived Threat Level	Region																											
	U.S. Virgin Islands		Puerto Rico		Navassa		Florida		Flower Gardens NMS		Main Hawaiian Islands		Northwestern Hawaiian Islands		American Samoa		U.S. Remote Insular Areas		Republic of the Marshall Islands		Federated States of Micronesia		Northern Mariana Islands		Guam		Republic of Palau	
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
Climate change and coral bleaching	M	M	M	M	NA	L	H	H	L	L	L	M	L	M	M	H	M	M	H	H	M	L	M	M	L	H	H	H
Diseases	H	H	H	M	NA	M	H	H	L	L	L	M	L	L	L	M	L	L	L	L	L	L	L	L	L	L	L	L
Tropical storms	H	H	L	M	NA	M	M	M	L	L	L	L	L	L	M	M	L	L	M	M	L	L	M	M	M	M	L	L
Coastal development and runoff	H	H	H	H	NA	L	H	H	L	L	H	H	L	L	H	H	L	L	M	M	H	H	H	M	H	H	H	H
Coastal pollution	H	H	H	M	NA	L	H	H	L	L	H	H	L	L	H	M	L	L	L	L	M	L	H	M	H	H	H	L
Tourism and recreation	M	H	M	M	NA	L	M	M	L	L	H	H	M	L	L	L	L	L	L	L	L	L	M	L	M	H	M	M
Fishing	H	H	H	H	NA	H	H	H	L	M	H	H	M	M	H	H	M	M	M	M	H	H	M	M	M	H	M	M
Trade in coral and live reef species	L	L	H	M	NA	L	M	M	L	L	H	H	M	L	M	L	L	L	H	M	L	L	L	L	L	L	L	L
Ships, boats, and groundings	H	H	M	M	NA	L	H	H	M	M	H	M	H	M	M	L	M	M	L	L	H	H	M	M	M	M	M	L
Marine debris	L	M	M	L	NA	L	M	M	L	L	M	M	H	H	L	L	M	M	L	L	H	L	M	L	L	M	M	L
Aquatic invasive species	L	L	L	L	NA	L	M	M	M	M	H	H	H	L	M	L	M	L	M	M	L	L	L	L	L	L	M	L
Security training activities	L	L	H	L	NA	L	L	L	L	L	M	M	L	L	L	L	L	L	L	L	L	L	H	M	L	L	L	L
Offshore oil and gas exploration	L	L	L	L	NA	L	L	L	M	M	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Other	L	L	H	L	NA	L	L	M	L	L	M	L	L	L	L	M	H	M	L	L	M	L	H	H	L	L	L	L

H = High priority threat

M = Medium priority threat

L = Low priority threat

Source: Waddell 2005: *State of Coral Reef Ecosystems of the United States and the Pacific Freely Associated States: 2004*. NOAA/NCCOS



member activities addressing the threats to coral reef ecosystems.

This report is organized by the Strategy's 13 goals and their related objectives. Each chapter is arranged by the following framework:

- **Rationale for Action**—describes the justification for each goal.
- **Summary of Implementation**—provides an overview of the types of activities conducted by USCRTF members and partners during 2002–2003 to address each goal.
- **Highlights of Task Force Member Activities**—lists USCRTF members' major accomplishments by goal objectives. Many of the activities highlighted represent activities conducted in conjunction with other agencies at the federal, state, territory, and local levels; academic institutions; nongovernmental organizations; and others.
- **Future Challenges**—describes obstacles that need to be addressed and future activities required to better address the goals.

This report was produced in collaboration with members of the USCRTF and its partners to provide a summary of activities implemented in 2002–2003 that helped fulfill the goals and objectives of the Strategy. This report is not intended to be a comprehensive list of agency programs and activities directly or indirectly affecting coral reefs. More comprehensive information on USCRTF accomplishments and future challenges can be found on the USCRTF website (<http://www.coralreef.gov>) or by contacting USCRTF members directly. The vast majority of the activities outlined in this report have been accomplished through partnerships and have resulted in on-the-ground achievements in key issues such as capacity building, effective use of marine protected areas, and education and outreach.

Coral reef ecosystems face increasing pressures. However, as this report demonstrates, the USCRTF and its partners remain committed to identifying and reducing the threats to coral reefs and conserving healthy and resilient coral reef ecosystems for current and future generations.