

NOTICE OF A REPORT



NOAA announces that the first-ever biennial report on the condition of coral reefs – *State of Coral Reef Ecosystems of the United States and the Pacific Freely Associated States: 2002*¹ – is now available. This report was called for by the U.S. Coral Reef Task Force (USCRTF) in The National Action Plan to Conserve Coral Reefs (March 2000). It was the result of a nationally coordinated effort initiated by the USCRTF to assess the condition of coral reef ecosystems. NOAA's Ocean Service led the development of this report that was authored by 38 experts and supported by 79 contributors from government agencies and nongovernmental organizations across the Nation and internationally.

The report assesses the condition of reef resources, ranks the relative importance of environmental pressures that have degraded reefs, highlights significant actions taken by USCRTF agencies to conserve coral reef ecosystems, and provides recommendations from coral reef managers to fill information gaps. As such, it is a baseline to which future assessments will be compared, thereby allowing scientists to detect and ultimately predict changes through time in coral reef ecosystem condition.

Background

There are an estimated 7,607 mi² of U.S. reefs and a range of 4,479-31,470 mi² off the Freely Associated States. U.S. shallow-water coral reef ecosystems are found along the continental shelf of the northern Gulf of Mexico and the Western Atlantic, and around Caribbean and Pacific islands.

Activities associated with coral reef ecosystems contribute significantly to local economies. Based on 2000 data from the U.S. Census, an estimated 10.5 million people reside in U.S. coastal counties and islands near shallow reef systems, with another 203,000 on islands of the Freely Associated States. Data from a variety of studies are used to conclude that annual expenditures are at least \$17.5 billion from the 45 million tourists that are attracted to U.S. coral reefs. Another 113,000 tourists annually spend over \$84.8 million on the islands and atolls of the Freely Associated States.

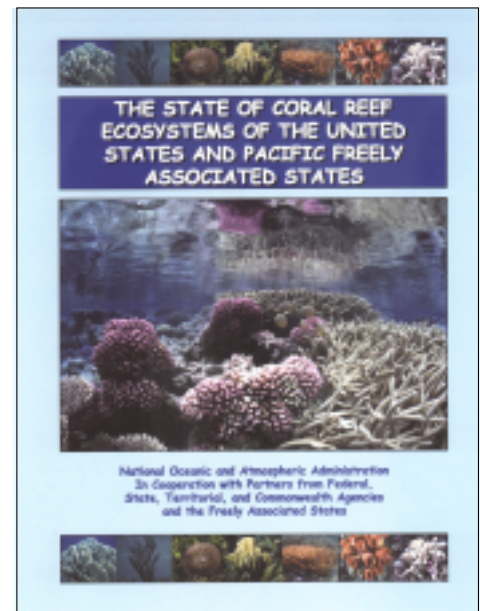
With rapidly increasing tourism and population growth rates (most on the order of 20%, with some being far higher) over the last decade, there is evidence that coral reef ecosystems cannot support such intense human pressure and are generally degraded worldwide.

The USCRTF called for a nationally coordinated mapping and monitoring program to help track and evaluate the condition of U.S. coral reef ecosystems, with biennial reports to the Nation. This report is the first in a series of reports. Activities that will culminate in the second biennial report are now underway in order for that report to be issued in 2004.

Report Highlights

Little is known about coral reef function, structure, and condition. Most reefs have yet to be mapped and their biotic resources are not yet fully known. This report represents the first effort in the collection of consistent, comparable scientific information to assess the status of coral reef health. It includes the latest

¹ The independent nations that comprise the Pacific Freely Associated States are three former U.S. Trust territories (the Federated States of Micronesia and the Republics of Palau and the Marshall Islands) that retained close U.S. ties. Associates of the USCRTF, they requested to be included in this report.





data from published literature and unpublished information from coral reef managers and scientists, and has been peer reviewed by over 100 coral reef ecosystem experts. Information from recent USCRTF mapping, research, monitoring, and conservation initiatives are also included.

All U.S. jurisdictions still have some reefs in good-to-excellent condition, although some of these may be found only in offshore, deeper locations. While there are still areas where healthy near-pristine reefs predominate, all shallow-water reefs near urbanized coasts have been

degraded to some extent by multiple human impacts and natural factors such as hurricanes and diseases.

Remote coral reef ecosystems with little coastal development and low fishing pressure (i.e., the Flower Garden Banks National Marine Sanctuary, the Northwestern Hawaiian Islands, and remote National Wildlife Refuges) are in excellent condition. Those reefs have generally high species diversity with many abundant, large fish and invertebrates.

The primary environmental pressures considered responsible for degrading coral reefs within the U.S. and Freely Associated States are three human-related factors: coastal development and runoff, pollution, and fishing. Other human-related factors (e.g., tourism and recreation activities, boats and ship groundings, the harvest and trade in corals and live reef species, invasive species, and marine debris) also contribute to degradation of coral reef ecosystems.

The outlook for tracking changes and evaluating the impacts of coral conservation activities on the condition of coral reef ecosystems is positive. Some management actions have been taken that will be effective in retarding reef ecosystem decline. Other positive results are evident from the concerted USCRTF efforts of the past several years to assure solid and comparable scientific data on the condition of coral reefs for all jurisdictions. Data are now being generated from the efforts of NOAA and its partners to map and build local capacity for long-term monitoring of reef ecosystems. A National Mapping and Monitoring Information Network and a 'Report Card' based on coral reef condition indicators has been initiated to effectively track, evaluate, and communicate through biennial reports the effectiveness of conservation measures to reverse degradation of coral reef ecosystems. One of the basic conclusions of this report is that while coral reef ecosystems are rapidly losing their 'natural condition,' effective actions can be taken to halt this trend if implemented quickly and aggressively.



Report Availability

Released September, 2002, the report is available in pdf format on NOAA's Coral Reef web site at <http://www.coralreef.noaa.gov> and at <http://www.nccos.noaa.gov>.



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