

- Congressional Policy Brief - United States Coral Reef Task Force



"NOAA, on behalf of the Department of Commerce, is honored to serve as Co-Chair of the U.S. Coral Reef Task Force, along with the Department of the Interior. The Task Force serves as an important forum for bringing the resources and expertise of the federal agencies together, working with our state and territory partners to conserve and better understand our nation's valuable coral reef ecosystems."

> - Tim Keeney Deputy Assistant Secretary for Oceans and Atmosphere, NOAA and U.S. Coral Reef Task Force Co-Chair



Sponge, coral, and sea rod. Photo and Credit: Florida Keys National Marine Sanctuary Staff

Fire coral and mustard hill. Photo: Thomas K. Gibson Credit: Florida Keys National Marine Sanctuary

Introduction

Healthy coral reefs are among the most biologically diverse and economically valuable ecosystems on earth, providing food, jobs, recreational opportunities, coastal protection, and other important services. Unfortunately, increasing human effects, climate change, and other factors have damaged many of the world's coral reefs. According to the Global Coral Reef Monitoring Network's *Status of Coral Reefs of the World: 2004*, 70 percent of the world's coral reefs are threatened, and 20 percent of those are damaged beyond repair. The decline and loss of coral reefs have significant social, economic, and ecological effects on people and communities in the United States and around the world.

Mission of the U.S. Coral Reef Task Force

In June 1998, Presidential Executive Order 13089 established the U.S. Coral Reef Task Force (Task Force) to lead, coordinate, and strengthen U.S. government actions to preserve and protect coral reef ecosystems. The Task Force members include 12 federal agencies, seven U.S. states and territories, and three freely associated states (please see the member list on page 4).

How the Task Force Works

The Task Force has led the development of national and local strategies to conserve coral reefs, increased collaboration among federal agencies and jurisdictions in coral reef regions, and helped its members launch new actions to protect and manage reef ecosystems. In 2000, the Task Force developed the *National Action Plan to Conserve Coral Reefs*, the first comprehensive U.S. strategy to conserve coral reefs. The *Action Plan* is the nation's roadmap to more effectively understand coral reef ecosystems and reduce the adverse effects of human activities. The *Plan* outlines 13 conservation strategies (goals) within two fundamental themes to address the most pressing challenges facing reefs today The Task Force also holds biannual public meetings to discuss key issues, propose new actions, and review progress.

The *Action Plan* and other Task Force documents, reports, and strategies may be viewed at http://www.coralreef.gov/library/index.html.

Accomplishment Highlights

Mapping and Monitoring of Coral Reef Ecosystems

The Task Force launched new efforts to map all shallow-water coral reefs of the United States and implement a nationally coordinated program to inventory, assess, and monitor U.S. coral reef ecosystems. Monitoring and assessment of reef ecosystems has increased, and shallow-water benthic habitat maps have been completed for Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Northwestern Hawaiian Islands, the main Hawaiian Islands, the Republic of Palau, Puerto Rico, and the U.S. Virgin Islands. To date, 9,200 km² of U.S. coral reefs have been mapped.



Benthic habitat map.

Local Action Strategies – Linking National Goals to Local Action

In 2002, the Task Force launched development of three-year (Fiscal Year 2005 – 2007) Local Action Strategies (LAS) in each of the seven member U.S. states, territories, and commonwealths. The Task Force prioritized six key threats for action:

- Over-fishing
- Land-based sources of pollution
- Recreational overuse and misuse
- Lack of public awareness
- Climate change and coral bleaching
- Disease

The LAS provides a framework for Task Force member agencies to identify and address these threats and additional local needs, connect local priorities to national goals, and coordinate federal agency actions with local management of reef resources. In 2007, the Task Force published *Status of Local Action Strategies to Conserve and Protect Coral Reefs: 2002-2006*, which identifies the major accomplishments of this effort, the amount of funding and assistance provided to achieve these results, and a detailed lessons-learned section on how the LAS process can be improved. The Task Force is currently working on the next phases of the LAS effort.

Reducing the Amounts, Sources, and Cumulative Effects of Pollution

Task Force members have taken a number of actions to address pollution issues. For example, the Environmental Protection Agency (EPA) and the U. S. Department of Agriculture's (USDA) Natural Resources Conservation Service have been establishing federal/local partnerships to voluntarily implement best management practices within coral reef watershed areas to reduce sediment and nutrient loads from affecting coral reefs.

In addition, the U.S. Coast Guard, NOAA, the state of Hawaii, and the Department of the Interior (DOI) collaborated to conduct large-scale marine debris removal efforts in the Northwestern Hawaiian Islands. From 1996 to 2006, over 560 tons of marine debris was removed from coral reef ecosystems and shorelines to protect habitat, promote navigational safety, and conserve threatened and endangered species. These islands, now part of the Papahānaumokuākea Marine National Monument, are particularly prone to the accumulation of floating debris due to their central location in the North Pacific Subtropical Gyre. Most of the debris is derelict fishing gear that entangles and kills endangered Hawaiian monk seals, threatened green sea turtles, coral, and other wildlife.



Marine debris in the Northwestern Hawaiian Islands.



Jurisdiction and New Protected Areas

American Samoa – 8 Commonwealth of the Northern Marianna Islands – 5 Florida – 8 Hawaii – 1 Puerto Rico – 11 U.S. Virgin Islands – 4

Improving the Use of Coral Reef Protected Areas

The Task Force calls for strengthening and expanding the nation's network of coral reef marine protected areas. In 2000–2004, Task Force members worked with communities and stakeholders to establish 37 new protected areas in six jurisdictions (see list at left). Specific coral reef protected area management plans and coordinated monitoring programs for these sites help ensure the long-term viability, ecological integrity, and sustainable use of coral reefs. In 2007, NOAA, in partnership with the Task Force, released the first assessment of U.S. coral reef protected areas: Report on the Status of Marine Protected Areas in Coral Reef Ecosystems of the U.S. Volume 1: Marine Protected Areas Managed by U.S. States, Territories, and Commonwealths. The Report and other Task Force documents, reports, and strategies may be viewed at http://www.coralreef.noaa.gov.



Elkhorn coral and a clubtip finger coral in the foreground.

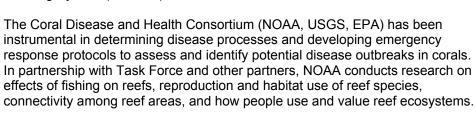
Research of Coral Reef Ecosystems

Research continues to provide a better understanding of the natural and anthropogenic influences on the dynamics of coral reef ecosystems, and the development of tools and solutions for improved management. For example, the National Science Foundation has initiated a LTER (Long-Term Ecological Research) program focused on a coral reef ecosystem in French Polynesia addressing different influences on the performance of reef-building corals in the tropical Pacific.



Sponge and seafan.

Similarly, the DOI's U.S. Geological Survey (USGS) research focuses on ecosystem processes including effects of global dust on reef decline, the resilience of coral reefs to increased water temperatures, and providing data to document reef health. In response to research and management needs, the National Aeronautics and Space Administration (NASA) is funding research to improve remote imaging of coral reefs, seagrasses, other benthic substrates, as well as water column constituents. NASA is also developing a sensor that can be flown on small aircraft, and could be utilized for NOAA's Coral Reef Early Warning System (CREWS) stations.





A knobby purple sea rod.

Reducing Threats to Reefs Internationally

Task Force member agencies have increased efforts and leadership to help reduce the pressures on reef ecosystems internationally. The U.S. Agency for International Development (USAID), U.S. Department of State (DOS), NOAA, and DOI have engaged domestic and international partners to increase the prominence of coral reefs in international fora. DOS continues to provide substantial leadership and financial support to the International Coral Reef Initiative (ICRI) and ICRI-related activities. The United States, with Mexico, are serving as ICRI Co-Secretariats for 2007-2009. USAID supports projects in over 20 countries that directly promote the protection and improved management of coral reef ecosystems. To view the *Congressional Policy Brief: International Year of the Reef 2008 and International Coral Reef Initiative*, please visit our website at http://www.legislative.noaa.gov.



A closeup of a cavernous star coral (Montastrea cavernosa). Photos: Florida Keys National Marine Sanctuary

Looking to the Future

Forthcoming

A new USDA Conservation Effects Assessment Project (CEAP), located in the Jobos Bay Watershed in Puerto Rico, was initiated with NOAA in 2007. CEAP is an effort by the USDA to quantify environmental effects and benefits of conservation practices. This project will establish a CEAP Special Emphasis Watershed co-located at the Jobos Bay National Estuarine Research Reserve.

Special Emphasis Watersheds are strategically located watersheds with ongoing research and demonstration activities addressing specific resource concerns, such as water quality. The Jobos Bay project — the first Special Emphasis Watershed established in the tropics — will highlight interactions between upland and coastal ecosystems, and initiate a collaborative partnership between USDA and NOAA to address spatially complex natural resource issues in coastal environments.



A colony of boulder star coral.

U.S. Coral Reef Task Force Members

Co-Chairs

U.S. Department of Commerce, NOAA U.S. Department of the Interior

Federal Agencies

U.S. Agency for International Development

U.S. Department of Agriculture

U.S. Department of Defense

U.S. Department of Homeland Security

U.S. Department of Justice

U.S. Department of State

U.S. Department of Transportation

U.S. Environmental Protection Agency National Aeronautics and Space

Administration

National Science Foundation

States and Territories

Commonwealth of the Northern Mariana Islands Commonwealth of Puerto Rico State of Florida State of Hawaii Territory of American Samoa Territory of Guam Territory of the U.S. Virgin Islands

Non-Voting Members

Federated States of Micronesia Republic of the Marshall Islands Republic of Palau



Members and staff at the 2007 Task Force meeting in American Samoa

Resource Links

To learn more about coral reefs, and their importance to the United States as vital ecosystems, please visit:

- The United States Coral Reef Task Force http://www.coralreef.gov
- NOAA's Coral Reef Conservation Program http://coralreef.noaa.gov
- NOAA's Coral Reef Information Service (CoRIS) http://coris.noaa.gov
- International Coral Reef Initiative http://www.icriforum.org
- International Year of the Reef 2008 http://www.iyor.org

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