

NOAA Coral Reef Initiative



International Year of
the Coral Reef



Pollution, overfishing, and overuse have put many of our unique reefs at risk. Their disappearance would destroy the habitat of countless species. It would unravel the web of marine life that holds the potential for new chemicals, new medicines, unlocking new mysteries. It would have a devastating effect on the coastal communities from Cairns, Australia, to Key West, Florida—communities whose livelihood depends upon the reefs.”

President Bill Clinton

August 1996

In response to the growing threats to coral reefs around the world, 1997 has been declared the International Year of the Reef.

Participation in International Year of the Reef is occurring at all levels. Governments from around the world, including the United States are taking part, as are state and local entities, universities, non-profit organizations, and private sector and grass root organizations.

In the United States, the Department of Commerce’s National Oceanic and Atmospheric Administration has the primary responsibility for the stewardship of marine resources with activities including monitoring the health of domestic coral reefs, restoring damaged or destroyed sections of coral reefs, and maintaining the health of coral reefs through management, research and education.

This year NOAA is a leader of the federal effort to further research, educate and sustain these vital marine resources for generations to come.

Why Care About the Coral Reefs?

Coral reefs are rain forests of the sea. Coral reefs are some of the most spectacular and diverse places on earth:

- Home to almost a million species;
- Sources of new medicines and biochemicals;
- Sources of food, jobs and storm protection for millions of people;
- Ecosystems that include coral communities, sea grasses and mangroves;
- Cover less than one percent of the earth's surface;
- Easily affected by human activities.

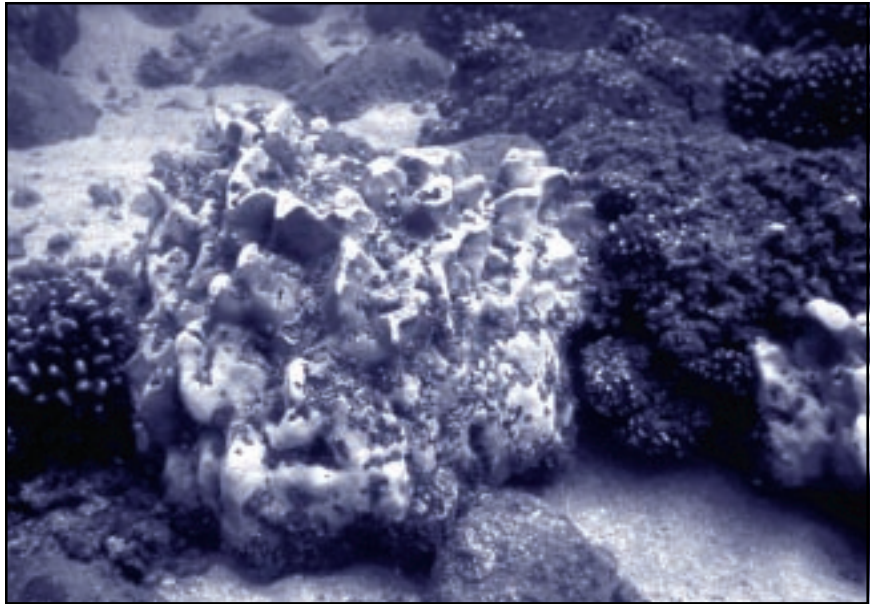
Coral reefs are dying. Estimates suggest that two-thirds of the world's reefs are dying:

- 10 percent are degraded beyond recovery;
- 30 percent are in critical condition and may die within 10 to 20 years, particularly those near human populations;
- If current threats continue, another 30 percent may perish by 2050;
- Pollution like sewage, fertilizers and sediment run-off is a major threat;
- Three quarters of all ocean pollution originates on land;
- Over-fishing and over-use are serious threats to many coral reef ecosystems;
- Destructive fishing practices like cyanide and dynamite fishing destroy large sections of reef;
- Reefs need warm, clear, shallow sea water to survive.

Two international partnerships are increasing awareness and responding to the growing problem of coral reef loss:

- 1997 has been designated the **International Year of the Reef (IYOR)** to promote coral conservation efforts and increase public awareness about the value and loss of coral reefs;
- The **International Coral Reef Initiative (ICRI)**

What Is Being Done?



was established in 1994 to support protection, restoration and sustainable use of coral reef ecosystems.

The International Year of the Reef (IYOR)

1997 was declared the International Year of the Reef in response to increasing threats and loss of coral reefs.

IYOR is a global effort to increase public awareness about coral reefs, and support research and management efforts like ICRI to conserve them.

The United Nations, the United States and more than 50 other nations and organizations are involved in the production of videos, posters and other materials to increase public awareness of coral issues during 1997. For example, governments of the South Pacific have jointly launched a regional campaign through the South Pacific Regional Environment Programme under the theme “Coral Reefs: Their Health, Our Future!”

International Coral Reef Initiative (ICRI)

The United States, Australia, France, Jamaica, Japan, the Philippines, Sweden, and the United Kingdom founded ICRI in 1994 to provide protection, restoration and sustainable use of reef ecosystems for the benefit of current and future generations. More than 70 countries are now participating in ICRI.

ICRI builds on existing coral conservation activities and the principles established by the Biodiversity Convention to protect and sustainably use the world's biodiversity.

Coral reefs are found in tropical seas of more than 100 countries. ICRI was established to help the people and governments of these nations:

- Strengthen local, regional, national and international programs for conservation, restoration and sustainable use of coral reefs and associated environments;
- Incorporate management provisions that promote these goals into each nation's existing development plans;
- Strengthen the capacity for developing and implementing these policies;
- Establish coordinated international and regional research and monitoring programs including a Global Coral Reef Monitoring Network.

Since 1994, ICRI has succeeded in elevating the issue of coral reef loss, and provided frameworks and incentives for nations to begin addressing the problems.

ICRI achievements include:

- Established a global coral reef monitoring network;
- Supported development of marine protected areas;
- Supported restrictions on cyanide fishing;
- Supported control of illegal coral trade.

The United States is one of the first countries with coral reefs to launch a national Coral Reef Initiative.

USCRI is designed to be a new platform of U.S. support for domestic and international coral conservation efforts.

United States Coral Reef Initiative (USCRI)

The goal is to strengthen and fill the gaps in existing efforts to conserve and sustainably manage coral reefs and related ecosystems (sea grass beds and mangrove forests) in U.S. waters.

The U.S. has significant coral reef resources in the southern Atlantic, Caribbean, Gulf of Mexico and western Pacific, including:

- Florida Keys coral ecosystem is the third largest coral reef tract in the world—over 360 kilometers long covering over 2800 square nautical miles—including over 5500 marine species and the world’s largest sea grass bed (Florida Bay);

Our work together on the International Coral Reef Initiative is a shining example of what we can achieve...our effort to save the world’s reefs is a model for the work that we can do together in other environmental areas.”

President Bill Clinton

August 1996

Great Barrier Reef, Australia

- Deep-water coral reefs of the Oculina Banks off the U.S. southern Atlantic coast;
- Diverse Caribbean coral reefs in Puerto Rico and the U.S. Virgin Islands;
- Northernmost coral reefs in North America on salt-domes off the coast of Texas.
- Extensive coral reefs of the U.S. Pacific covering over 10,000 square miles.

U.S. coral reefs are important for many reasons including their economic contributions. For example:

- Four million tourists visit the Florida Keys contributing over \$1.2 billion to tourism-related services every year;
- In the U.S., coral reef ecosystems support hundreds of commercial and recreational fisheries worth millions of dollars to local and state economies;

- The Florida Keys coral reefs are the number one dive destination in the world.
- Three million tourists visit one of Hawaii's many coral reef sites every year;
- In American Samoa, coral reefs play an important cultural role and supply over 50 percent of the fish caught locally for food;
- In Guam and the Northern Marianas, 90 percent of new economic development is related to coastal tourism;

USCRI is a partnership of federal, state, territorial and commonwealth governments, the scientific community, the private sector and other organizations.

The primary objective of USCRI is to foster innovative partnerships and cross-disciplinary approaches that reduce the threats to U.S. coral ecosystems.



How Will USCRI Be Implemented?

The National Oceanic and Atmospheric Administration (NOAA) is one of several U.S. federal agencies contributing to the USCRI.

NOAA is committed to the protection and sustainable use of U.S. coastal resources, including coral reefs.

In 1996, NOAA spent over \$25 million for ongoing research, monitoring, management and outreach activities related to coral resources, including:

- **Protected Area Management:** NOAA's national system of marine and coastal protected areas includes four National Marine Sanctuaries and a National Estuarine Research Reserve with coral reefs.
- **Sustainable Fisheries:** U.S. coral reef ecosystems support valuable commercial and recreational fisheries. Many of these fisheries are in serious condition. For example, 23 percent of 200 southeast reef fish species are overfished, one percent are at full utilization, and 76 percent are of unknown status.



- **Protected Species:** Conservation and recovery of reef-associated protected species such as marine mammals, sea turtles and corals.
- **Coastal Zone Management:** Working with state and other partners to guide sustainable use of the coast and prevent negative impacts to coral ecosystems from pollution.
- **Research and Monitoring:** From satellites to submersibles, NOAA provides the resources, people, and tools to study, monitor, understand and manage reef ecosystems.
- **Education:** NOAA works with states and universities to provide materials and opportunities to thousands of people to help them learn about and participate in stewardship of coral reefs.

NOAA is implementing a national strategy to understand, conserve and restore coral reef ecosystems for current and future generations.

The strategy consists of new measures in three priority areas:

- Solutions for conservation and sustainable development;
- Information for decision-makers and the public;
- Science for improved local and regional management.

In 1996, NOAA started new coral reef projects to begin filling gaps in U.S. efforts. Twenty percent of the funds went to build public-private partnerships for coral conservation through matching grants and the National Fish and Wildlife Foundation.

NOAA's new contributions to USCRI include:

Solutions for Conservation and Sustainable Development

- **Reducing Human Impacts:** Coastal Zone Management Programs in the Caribbean and Pacific are working to complete and implement plans for reducing inputs and impacts of non-point source pollution from agricultural and urban sources.

NOAA's Contributions to the US Coral Reef Initiative

- **Promoting Sustainable Use:** Sea Grant extension agents have worked with other federal, local and private entities to transfer information and technologies to local communities. In the Pacific, this has supported sustainable use of reef resources through ecotourism and mariculture. Mariculture is important to (1) reestablish species that have been overfished; (2) provide alternatives to wild harvest and prevent damage to natural populations; and (3) provide economic development opportunities.
- **Sustainable Reef Fisheries:** In the western Pacific, NOAA supported the first comprehensive assessment of coral reef resources, current management efforts, and future management needs. In the Caribbean, NOAA and partners have helped develop marine protected areas and conduct research to determine how to best manage them.
- **Reef Restoration:** NOAA has developed and used new technologies for restoring damaged coral reefs in the Florida Keys and the Pacific.

Information For Decision Makers

- **Reducing Illegal Coral Trade:** NOAA's National Marine Fisheries Service is helping prevent illegal exports of corals by training import and export personnel about corals and trade regulations. The U.S. is the world's largest importer of coral products.
- **Increasing Public Awareness:** Public awareness about coral reefs is critical to their survival. NOAA works with divers, fishermen, teachers and businesses to help local communities understand how they can avoid damaging reefs.

Science For Improved Local And Regional Management

- **Monitoring Coral Health:** NOAA's National Marine Sanctuary Program and Coastal Ocean Program are working with partners to design and implement a network of long-term monitoring sites to track the health of coral ecosystems in the Caribbean and Pacific.

- **Understanding Human Impacts:** NOAA's Coastal Ocean Program, National Sea Grant Program and National Undersea Research Program support research to understand how reef communities respond to increased inputs of nutrients and sediment, and help coastal communities better manage coastal development to reduce impacts on coral ecosystems.
- **Forecasting Coral Bleaching:** Using satellite images of the sea surface, NOAA produces global ocean maps showing "hotspots" or increases in sea surface temperature that might cause coral bleaching. The maps are being used to forecast, confirm and study bleaching events worldwide. The forecasts allow managers to reduce other stresses on corals during bleaching events. New maps are available every week on the Internet at <http://psbgsil.nesdis.noaa.gov:8080/PSB/EPS/SST/climo.html>.

Get involved. The 1997 International Year of the Reef and the International Coral Reef Initiative are important opportunities to help stop the loss and degradation of coral reefs.

Build partnerships: Partnerships are essential to protect coral ecosystems. Working with the National Fish and Wildlife Foundation, NOAA is building public-private partnerships in coral reef conservation.

For more information on these opportunities, contact Dr. Jerry Clark, NFWF, Washington, D.C. (*Phone:* 202-857-0166; *Fax:* 202-857-0162).

NOAA is sponsoring a major public awareness campaign on coral reefs in 1997. Press packets, experts to contact and other information are available.

For more information on NOAA's and others efforts to protect and sustainably use coral reefs, US Coral Reef Initiative, or the 1997 International Year of the Reef, please contact Matt Stout, NOAA Office of Public Affairs, Washington DC (*Phone:* 202-482-6090).

What Needs To Be Done?

How To Get More Information

Other Coral Reef Initiative Contacts

American Samoa

Lelei Peau
Coastal Zone Mgmt. Program
Phone: 684-633-5155
Fax: 633-4195

Commonwealth of the Northern Mariana Islands

Manuel Sablan
Coastal Resources Mgmt. Office
Phone: 670-322-5091
Fax: 322-5096

Eric Gilman
Office of the Governor
Phone: 670-664-238
Fax: 664-2390

Florida

Paula Allen
Environmental Community and
Economic Policy Development
Phone: 904-488-5551
Fax: 922-6200

Guam

Vincent Arriola
Bureau of Planning
Phone: 671-472-4201
Fax: 477-1812

Mike Ham
Coastal Management Programs
Phone: 671-475-9672
Fax: 475-1812

Hawaii

Douglass Tom
Coastal Zone Mgmt. Program
Phone: 808-587-2875
Fax: 587-2899

Puerto Rico

Carmen Gonzales
Jobos Bay National Estuarine
Research Reserve
Phone: 809-853-4617
Fax: 853-4618

Texas

Larry McKinney
Texas Parks & Wildlife Department
Phone: 512-389-4636
Fax: 389-4394

U.S. Virgin Islands

Paul Thomas
Department of Planning and
Natural Resources
Phone: 809-774-3320
Fax: 775-5706

United States CRI Co-chairs

Michael Crosby
National Oceanic and Atmospheric
Administration
U.S. Department of Commerce
Phone: 301-713-3155
Fax: 713-4012

Nancy Fanning
Territorial and International Affairs
U.S. Department of the Interior
Phone: 202-208-6816
Fax: 501-7759

United States International Initiative

Peter Thomas
ICRI Coordinator
OES/ENV
U.S. Department of State
Washington, DC 20520