

GOAL 10: **IMPROVE OUTREACH AND EDUCATION**

KEY THREATS ADDRESSED:

Improving outreach and education is critical to helping people understand the value of coral reef ecosystems and how to avoid damaging them. Outreach and education are an essential part of fulfilling all the other goals in this strategy, and therefore address a number of key threats to coral reef ecosystems. The figure below is a general summary of the relative importance (H = high, M = medium, L = low) of this goal area (outreach and education) in addressing the impacts from these threats. A higher ranking suggests that outreach and education activities are considered more important to addressing the threat. Lower rankings suggest that although activities under this goal may make significant contributions, they may currently be less important to addressing the threat. The rankings are a summary of input shown in Table 2. The actual importance of this goal to addressing threats to reefs will depend on location and other factors (see Tables 3 and 4 for regional comparisons).

| THREATS | Global warming/ climate change | Diseases | Hurricanes/ Typhoons | Extreme biologic events | Overfishing | Destructive fishing practices | Habitat destruction | Invasive species | Coastal development | Coastal pollution | Sedimentation & runoff | Marine debris | Overuse from tourism | Vessel groundings | Vessel discharges |
|---|---|-----------------|---------------------------------|------------------------------------|--------------------|--|--------------------------------|-------------------------|--------------------------------|--------------------------|---------------------------------------|----------------------|---------------------------------|--------------------------|------------------------------|
| Improve Outreach and Education | H | L | L | L | H | H | H | H | H | H | H | H | H | H | H |

RATIONALE FOR ACTION:

Reducing human impacts to coral reef ecosystems often requires changing our collective behavior, beliefs, values, and decision making-criteria about when, how, and whether to conserve these vital ecosystem. An informed, engaged public, including policy makers, industry representatives, non-governmental organizations, and other stakeholders, is fundamental to successfully achieving the goals of this strategy. People will be more likely to alter their actions and support efforts to conserve coral reefs if they are knowledgeable about why coral reefs are important to their lives, understand how their actions affect the condition of the reef, and are aware of what individually and collectively can be done to contribute to coral reef protection.

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By building on existing education efforts and working collaboratively, we can increase awareness of coral reef conservation issues and inform specific target audiences about how they can help protect coral reef ecosystems.

Education efforts will be most effective in addressing overfishing and destructive fishing practices, habitat destruction, coastal development and pollution, overuse from tourism, and vessel groundings. An informed public will be more likely to understand the need for and abide by fishing regulations. Habitat destruction caused by unplanned coastal development, pollution, and sedimentation runoff may decrease as the public becomes informed of the implications of land-based actions on coral reef ecosystems and learn cost-effective ways to mitigate their impacts. The millions of divers and snorkelers who visit coral reef ecosystems every year physically damage reefs in areas where their activities are heavily concentrated. The tourism industry has realized the need to insure that visitors use natural resources responsibly and is looking for programs to raise awareness of this problem among divers and snorkelers. Finally, hundreds of vessel groundings on coral reefs could be avoided if accurate marine maps were distributed to boaters educated in both boat operation and map reading.

OUTREACH AND EDUCATION STRATEGY

The goal of this strategy is to increase awareness and understanding of the ecological, cultural and socio-economic importance of coral reef ecosystems among the widest possible audience. The strategy is outlined in the U.S. National Action Plan to Conserve Coral Reefs and related documents of the Outreach and Education working group of the U.S. Coral Reef Task Force. For more detailed information see <http://coralreef.gov/>. The strategy includes the following objectives to achieve the goal:

- Objective 1: Raise public awareness and appreciation for coral reef ecosystems through targeted and focused communications campaigns.
- Objective 2: Incorporate coral reef ecosystem issues in education programs to promote understanding of marine conservation.
- Objective 3: Inform the public and policy-makers about accomplishments and recommendations of the U.S. Coral Reef Task Force.
- Objective 4: Increase understanding of coral reef ecosystems through conducting comprehensive assessments of monitoring and coral reef habitats.

Objective 5: Support outreach and education initiatives in the states and territories and initiate grants to local community groups.

SUMMARY OF ACCOMPLISHMENTS (2001)

The following is a partial summary of recent accomplishments by members and partners of the U.S. Coral Reef Task Force to achieve the goal and objectives. For more detailed information see <http://coralreef.gov/>.

Objective 1 Accomplishments:

- Prevented approximately 398,000 tons of soil from being eroded from agricultural land and damaging Caribbean coral reefs by providing over 6,400 customers with conservation education assistance in developing sound conservation plans. (USDA and partners)
- Developed an outreach marketing strategy based on state-wide focus groups and market survey of conservation issues in Hawaii. Began implementing outreach strategy. (Hawaii)
- Coordinated a multi-island community event for coral spawning and produced information brochure on spawning events in Hawaii. (Hawaii)
- Included coral reef protection information in materials to over 116,000 people through Sea Partners, the Coast Guard's marine environmental protection outreach and education program. (USCG)

Objective 2 Accomplishments:

- Distributed 30,000 Coral Reef Teacher guides throughout the U.S., Mexico and Belize hosted virtual Teacher Workshops on Coral Reefs for 1,000 teachers including a session in Spanish. (multiple partners)
- Provided over 120 books on coral reefs to the public library in American Samoa. (AS)

Objective 3 Accomplishments:

- Publicized the accomplishments and work of the Task Force and the All Islands Coral Reef Initiative in brochures distributed to stakeholders, governments, non-governmental organizations (NGOs), and industry. (multiple partners)

Objective 4 Accomplishments:

- Developed *Protect the Living Reef* a training program teaching low-impact diving or snorkeling techniques and incorporated the videos and guides in a new Coral Reef

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Conservation Specialty Course (certified by the Professional Association of Dive Instructors (PADI)) and the Reef Condition (RECON) Monitoring Program. (multiple partners)

- Developed and field-tested a rapid-assessment protocol for recreational divers and students to survey the condition of stony corals, the presence of key indicator organisms, and conspicuous human-induced damage to reef systems in the wider Caribbean. Trained instructors and divers in the Florida Keys, USVI, and Puerto Rico. (multiple partners)

Objective 5 Accomplishments:

- Established a grants program with the National Fish and Wildlife Foundation (NFWF) that provided support through public-private partnerships for education and outreach on coral reefs. (NOAA)
- Reduced waste contamination to reefs from pig farming and assisted American Samoan farmers in upgrading their swine management skills. (AS)
- Funded three community-based reef monitoring and assessment projects in Hawaii (HI, NOAA and partners).

IMPLEMENTATION PLAN 2002-2003

Successful implementation of the strategy is contingent on funding and other factors, including effort by a variety of federal and non-federal organizations. The International working group of the U.S. Coral Reef Task Force, working with many partners, provided the following partial summary of key actions needed from government and non-governmental entities in 2002-2003 to help fulfill the goal and objectives. More detailed information is available from the working group or member organizations of the U.S. Coral Reef Task Force (<http://coralreef.gov/>).

To Address Objective 1:

- Continue dissemination of newly developed coral reef videos and educational materials to resource managers and tourism industry.
- Develop partnerships with the cruise industry (e.g., Florida-Caribbean Cruise Association).
- Conduct a targeted domestic and international marketing, information and dissemination campaign, focused on key sectors such as travel and tourism, land use (developers/agriculture), policy makers and fishing (commercial/recreational).
- Educate divers on low-impact diving through continued collaborations with NOAA, National Park Service, Project AWARE, community NGOs and state and territorial agencies.
- Continue providing conservation education assistance to private landowners and land users and help them develop and implement conservation plans.

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- Continue educating reef users through Team OCEAN's volunteer program, and expand program to two new areas of the Keys – Islamorada and Marathon.
- Implement Hawaii outreach and education strategy developed in FY2001.

To Address Objective 2:

- Develop curriculum for and teach Coral Reef Classroom to Monroe County students and teachers.
- Provide Web site access to educational materials for teachers and students.
- Provide coral reef related books to all high schools in American Samoa.

To Address Objective 3:

- Upgrade and coordinate the Task Force web-page and ensure linkages with all other initiatives.
- Produce annual Task Force accomplishments report.

To Address Objective 4:

- Develop and implement coral reef observing and forecast systems (see Goal 2: Assess, Monitor and Forecast Coral Reef Health).
- Provide information from coral reef monitoring and assessment efforts to stakeholders, managers and policy makers for effective use and management decisions.

To Address Objective 5:

- Support additional coral reef ecosystem outreach coordinator positions at national, regional and local levels.
- Increase support for small grants programs that build public-private partnerships for outreach and education on coral reefs worldwide.
- Train local stakeholders in monitoring techniques, data collection/processing, and public education/outreach in select locations within the wider Caribbean Region (e.g. USVI, Puerto Rico, Bahamas).
- Develop partnerships to train local tour operators in sound reef practices.