

In 2002, the U.S. Coral Reef Task Force identified the need for action at the local level to reduce key threats to coral reefs and called for the development of Local Action Strategies (LAS) in each of the seven states and territories which possess significant coral reef resources.

PUERTO RICO Local Action Strategy

In Puerto Rico, local and federal agency representatives were identified as leads in the development of individual LAS for each focus area. On April 30 and May 1, 2003, a kickoff meeting was held to develop draft LAS to address issues affecting coral reefs in Puerto Rico. A core group of people was convened to help draft the Puerto Rico LAS document, which will serve as the backbone for a long-term Puerto Rico Coral reef management plan. The LAS currently proposed build on the experience of many different stakeholders, and strengthen Puerto Rico coral reef management efforts through increased coordination between state and federal partners and local agencies.

LACK OF AWARENESS...

Puerto Ricans consider the sea as an integral part of their daily lives and many people have a basic knowledge of marine coastal ecosystems. However, increased education is needed about the direct relationship between human activities and their impacts on the marine environment. This focus area aims to promote awareness on the extent of these interrelationships and the consequences of different human activities.

Goals and Objectives

- Promote public awareness of the importance of coral reef ecosystems to Puerto Rico's economy
- Improve communication and promote participation of coastal communities and other stakeholders in planning efforts and protection of coral reefs

Project Examples

- Design and produce an educational and interactive CD or DVD on coral reefs
- Install signs in coastal areas to educate users on the different marine ecosystems and ways to protect them
- Identify, produce, and distribute educational information to coastal businesses about the importance of coral reefs to Puerto Rico's economy

Anticipated Outcomes

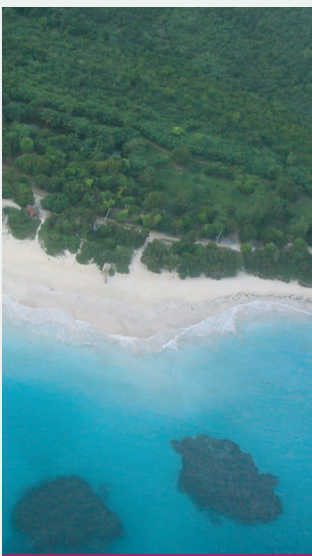
- Series of public education campaigns created and used to reach various interest groups
- Improved communication between all coral reef stakeholders

LAND-BASED SOURCES OF POLLUTION...

Rapid rates of human population growth and density in Puerto Rico have led to increased deforestation for agriculture, and increased discharge of sewage and industrial waste. Knowledge of the functions and processes controlling reef environments is currently limited, which confounds appropriate management actions that could be taken. This focus area addresses management options to control land-based pollution sources and to improve enforcement of and compliance with protection measures.

Goals and Objectives

- Reduce loss of live coral reef cover through the promotion and implementation of integrated watershed and land use management practices in at least two watersheds associated with coral reef communities
- Improve compliance and enforcement of laws, rules, and regulations related to construction and land development permits in order to prevent deterioration of coral reef habitats



ESTIMATED LAS PROJECT IMPLEMENTATION COSTS

Lack of Awareness
\$625,000

Land-based Sources of Pollution
\$980,500

Overfishing
\$1,285,000

Recreational Misuse/Overuse
\$1,020,000

Estimated costs derived from projects for which cost information is presently available



STAKEHOLDERS

Boat operators

Caribbean Fisheries
Management Council

Department of Natural
and Environmental
Resources

Dive instructors

Dive shop representatives

Environmental Planning
Board

Environmental Quality
Board

Marine ornamental
fishers

NGOs

NMFS

NOAA

Puerto Rico Sea Grant

Puerto Rico Tourism
Company

State water and power
agencies

University of Puerto Rico

U.S. Coast Guard
Auxiliary

USDA, Natural Resources
Conservation Service

USEPA

USFWS

contact

Project Examples

- *Implement best management practices to reduce pollution from agriculture*
- *Conduct training workshops for marina operators and the agricultural community on ways to reduce coastal pollution*

Anticipated Outcomes

- *Fully trained and knowledgeable enforcement staff*
- *Reduction in number of non-compliance reports for construction and land development activities*

OVERFISHING...

Reef fisheries in Puerto Rico's coastal waters have plummeted during the last two decades. It is important to take action in order to revive and attempt to sustain a healthy fishery for the future. Effective fisheries management directed towards restoring coral reef health and the fisheries supported by these reefs is the aim of this focus area.

Goals and Objectives

- *Increase the effectiveness of coral reef and fishery laws in promoting the restoration and cleanup of coral reefs impacted by abandoned equipment and fishing gear*
- *Reduce impacts of recreational fishing on coral reefs*

Project Examples

- *Purchase and acquisition of equipment for the designation of no-take reserves*
- *Identify and prioritize indicators and parameters that will designate no-take reserves*
- *Inventory current fisheries status*

Anticipated Outcomes

- *Increased enforcement and compliance of fishery regulations and laws*
- *Formal indication list and parameter guidelines for establishment of no-take reserves*

RECREATIONAL MISUSE/OVERUSE...

Ocean-related promotional services and attractive marine recreational activities are key to the local tourism industry and fundamental to Puerto Rico's economy. Coral Reefs are an integral part of the recreation and tourism in Puerto Rico. This focus area addresses the management of recreational activities to avoid or minimize negative impacts to coral reefs.

Goals and Objectives

- *Identify high priority coral reef sites*
- *Reduce damage to heavily used coral reef areas in Puerto Rico to ensure healthy and long-lasting coral reefs for the island and tourism industry*
- *Maintain/improve conditions in most heavily visited coral reefs sites to ensure sustainability of resource and long-lasting recreational boating use*

Project Examples

- *Assess damage by anchoring or trampling at target coral reef areas*
- *Install/increase number of buoys at target sites*
- *Revise and update management plans for target reef areas*

Anticipated Outcomes

- *Maps for the general public and boat users, including information on the identification and demarcation of safe anchoring zones at key reef sites*
- *Increased amount and appropriate usage of buoys installed at affected reefs*

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