U.S. ISLANDS
CORAL REEF INITIATIVE
WORKSHOP

SUMMARY REPORT

MAUI, HAWAI‘I
SEPTEMBER 25-26, 1997
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Prepared for:
The United States Coral Reef Initiative
THE OFFICE OF INSULAR AFFAIRS,
UNITED STATES DEPARTMENT OF THE INTERIOR
and the
OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT,
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Edited by:
Cheryl L. Anderson,
Research Associate, UH SSRI

Submitted by:
SOCIAL SCIENCE RESEARCH INSTITUTE,
UNIVERSITY OF HAWAI‘I AT MĀNOA
and the
THE PACIFIC BASIN DEVELOPMENT COUNCIL

With the Governments of:
THE TERRITORY OF AMERICAN SAMOA
THE TERRITORY OF GUAM
THE STATE OF HAWAI‘I
THE COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
THE COMMONWEALTH OF PUERTO RICO
THE TERRITORY OF THE UNITED STATES VIRGIN ISLANDS

The Coral Reef Initiative Workshop held in Maui, Hawai‘i on September 25-26, 1997 and this summary report document were funded by the Office of Insular Affairs, United States Department of the Interior under the Technical Assistance Project No. GEN-121.
ACKNOWLEDGMENTS

The Pacific Basin Development Council and the University of Hawaii's Social Science Research Institute would like to extend our thanks to all of the participants of the U.S. Islands Coral Reef Initiative Workshop. We appreciate the time you took from your busy schedules to discuss and plan future activities which will ensure the preservation of one of our most precious island resources—coral reef ecosystems.

We appreciate the cooperative efforts of Nancy Boone-Fanning in the Office of Insular Affairs, U.S. Department of the Interior and Dr. Michael Crosby at the Office of Ocean and Coastal Resources Management, National Oceanic and Atmospheric Administration in sponsoring the workshop and providing financial and informational resources for the participants.

The reports on the status of local coral reef initiative efforts and on the projects and activities to achieve the objectives of these regional plans show the enthusiasm, creativity, and commitment of the participants for the International Coral Reef Initiative. We encourage you to continue the collaboration fostered by this workshop as you engage in additional coral reef ecosystem management activities. Mahalo for your participation in the workshop and your extensive work in your islands.
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EXECUTIVE SUMMARY
The U.S. Islands Coral Reef Initiative Workshop was held on Maui the 25th and 26th September 1997, following the annual Pacific Coastal Zone Management Conference. During the first session, coastal managers and principal investigators for coral reef projects from American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Hawai‘i, Puerto Rico, and the U.S. Virgin Islands met with federal agency representatives to discuss the current status of the Coral Reef Initiative and to explore future directions for improving the management of coral ecosystems.

The meeting opened with a short visioning exercise in which participants were asked to describe their vision for coral reef ecosystems and management systems over the next five years. They were also asked to identify the types of actions that should be undertaken to achieve their vision. Participants from the American Flag Pacific Islands had engaged in this exercise previously, in December 1994, as they developed a regional coral reef initiative plan for their islands in response to the U.S. Coral Reef Initiative. Puerto Rico and the U.S. Virgin Islands participated in the development of regional initiatives in similar workshops for the Atlantic Gulf States. This year, the U.S. Islands, from the Pacific and Atlantic Oceans, have joined in an “island region” to more appropriately deal with specific needs of implementing the Coral Reef Initiative.

Following the regional workshops three years ago, participants returned to their local jurisdictions to promote the regional Coral Reef Initiative among numerous local agencies. The points of contact met regularly with several key agencies and local coral reef specialists to determine a strategy for achieving the objectives of the regional Coral Reef Initiative. Participants in these meetings included coastal zone and environmental managers, academic researchers, non-profit organizations, educators from elementary to university levels, government representatives, and local volunteers. These local experts worked to expand efforts on each of the islands through education and the development of community-based and sector-specific programs. The status report from each island, which appears later in this report, specifies the changes and progress made over the past three years in coral reef management.

At this workshop, consideration of future coral reef ecosystems and management extended the ongoing process of local coral reef initiative planning, and enabled workshop participants to formulate additional ideas for updating their regional plans and
developing activities that would facilitate achievement of their shared visions. Several weeks prior to attending the workshop, organizers sent questionnaires concerning the status of current coral reef programs and of future plans. The points of contact consulted their coral reef initiative planning groups with these questions before attending the workshop; therefore, the information they presented at the workshop, and the information contained within this report, represents the accumulation of knowledge from local people working with various aspects of local coral reef initiative implementation.

By the close of the workshop, participants had provided overviews on the status of projects and programs of their local coral reef initiatives. An interactive planning process elicited suggestions for future projects and reexamined goals for the coral reef initiative. Participants also refined a mission statement and discussed collaboration among the U.S. Islands from the Pacific region and from the Caribbean. In one and a half days of intensive discussions, participants increased their commitment to the International Coral Reef Initiative.

**STATUS OF CORAL REEF INITIATIVE PLANS AND PROJECTS**

The overviews of local coral reef initiatives presented by each island government demonstrated their commitment to the initiative through improvements in management which protect and enhance the health of their coral reefs. During the Year of the Reef, public awareness increased significantly and projects gained support from public agencies, private organizations, and community groups.

In order to meet the coral reef initiative objectives in each of the jurisdictions participating in the workshop, the Office of Ocean and Coastal Resource Management (OCRM), National Oceanic and Atmospheric Administration (NOAA) and the Office of Insular Affairs (OIA), United States Department of the Interior (DOI) provided funding for projects to assist the islands in coral reef management. The principal investigators of projects from all of the islands described their projects and outlined benefits to their coral reefs. (Brief abstracts appear in the appendix section of this document).

Discussions on the first day increased the awareness among workshop participants of coral reef management activities occurring throughout the U.S. islands. Several principal investigators offered technical assistance to coastal managers. Such assistance included linking descriptions of coral reef activities through a web page where new findings and research and innovative activities could be posted and providing film and transcripts from a video project which could be borrowed and translated into local languages. Participants encouraged each other to engage in collaborative projects.
STRATEGIC PLANNING SESSION

The second day was devoted to a planning session to identify opportunities for new local Coral Reef Initiative activities. Through an interactive working session, participants developed and prioritized projects for future funding. These projects appear in detail in the next section of this document. The summary is as follows:

American Samoa:
1) Scientific Research and Monitoring
   * CRI Invitational Workshop
   * Sedimentation Study
   * Monitoring of Coastal Development Projects
   * Recruitment of Hard Corals
   * Recruitment of Key Reef Fishes
   * Recovery of Coral Reef from Large Perturbations
2) Education and Public Awareness
   * The Envirobus
3) Legislative and Legal Review

Commonwealth of the Northern Mariana Islands:
1) Marine Science degree program at the Northern Marianas College
2) Improve capabilities of CNMI Marine Monitoring Team
3) Inventory CNMI’s Coral Reefs
4) Identify andRemediate Contaminated Sites
5) Inventory CNMI’s Seagrass Beds and Study Fish Habitat Functions
6) Establish Marine Protected Areas
7) Implement Best Management Practices for Non-Point Source Pollution
8) Add Coral Reef Inventory to GIS
9) Educational Video on Coral Reefs
10) Research Nutrient Flux to Ecosystem Dynamics on Reefs
11) Study Threat and Predict Impacts from Global Warming

Guam:
1) Reef Restoration, Phase II on Coral Recruitment Study
2) Reef Restoration, Phase II Expansion
3) Education: “Village to Village Education Road Show”
4) Education: “Encouragement of Youth and Development of Youth Groups”
5) Education: “Coral CD”
6) Education: “Signage”
7) Baseline Information: Survey Reef Areas
8) Reef Restoration Monitoring Network
9) Baseline Information: Coral Reef Atlas
10) Reef Restoration: Update 1970s Baseline Studies
11) Reef Restoration: Study of Recreational Impacts on Diminishing Fish Stocks
12) Resolve Jurisdictional Differences
**Executive Summary**

**Hawaii:**
1) Education, Communication, and Outreach
   * Expansion of Coral Reef Network Internet
   * Educational Video
   * Coral Reef Initiative Newsletter
   * Educational Display
2) Monitoring Program
   * Monitoring Workshop
   * Monitoring of Coral Reef Ecosystems
3) Baseline Information and Research
   * Variety of Research Projects

**Puerto Rico:**
1) Baseline Characterization
2) Capacitation of Personnel
3) Coral Reef Monitoring Program
4) Education and Outreach Programs

**U.S. Virgin Islands:**
1) Education & Public Awareness
   * Training for Marine Environment Teachers
   * Training for Workers in Visitor Industry
2) Baseline Information and Research
   * GIS for Reefs and Development
3) Reef Reseeding and Restoration
4) Training and Equipment
   * Training for Environmental Officers
5) Monitoring
6) Reef Reseeding and Restoration
   * Study Impacts of Recreational Activities on Declining Fish Stocks

**Management Issues and Options**

The final session of the workshop was devoted to discussion of critical issues which emerged throughout the workshop. After discussing several major problems, participants identified potential solutions and agreed on what could be done to resolve conflicts which could impede the further development of local coral reef initiative objectives.
A summary of the highlights from the discussion follow:

1) NOAA funding mechanism for Coral Reef Initiative projects:
   * Matching Fund Requirements
     Finding local matches for federal funding can be difficult. At funding levels less than $200,000, federal agencies cannot require matches in US territories and commonwealths, and this must be expressed in writing to the Fish and Wildlife Foundation.
   * Bureaucratic Inefficiency at the Fish and Wildlife Foundation
     Funding for Coral Reef Initiative project approved months ago had not been received by grantees. Projects which had obtained additional funding from other sources were in progress, but those which were dependent on the funds from the Foundation had not been able to proceed. Participants agreed that future funding should not be made through the Fish and Wildlife Foundation.
   * Letter to Dr. Baker from the Governors
     A letter written from governors may be the best and most effective means of facilitating the funding of Coral Reef Initiative projects directly from the Office of Ocean and Coastal Resource Management.

2) Army Corps of Engineers (USACOE)
   * Responsibility at Federal level for coral reefs is fragmented. Currently, the Environmental Protection Agency, the Fish and Wildlife Service, National Marine Fisheries Service, and the Office of Ocean and Coastal Resource Management have responsibility for coral reef management. US Federal law fails to protect reefs because each of these agencies has specific mandates which affect coral reefs, but they are not solely focused on coral reef management.
   * Information on the jurisdictional responsibilities for coral reef management will be pulled together by Jerry Norris and forwarded to the Points of Contact.
   * Proposed solutions: Amend existing legislation to consolidate or rationalize coral reef management responsibility or write new legislation.

3) Environmental Impact State/Environmental Impact Assessment EIS/EIA Process
   The EIS/EIA process should involve feedback, reevaluation, and long-term commitments.
   * Content: marine component needs to be required;
   * Qualifications/Disqualification/Malpractice of EIS Consultants:
     People who qualify as experts to evaluate impacts to coral reefs should have a measured level of professional competence. Individuals conducting EISs or EIAs which identify no major impact result and unidentified impacts occur as a result of the projects assessed should be disqualified from future work or held accountable on the grounds of malpractice, especially for consultants who perform these evaluations at high prices.
4) Water Quality/Substratum Quality Need to Be Included in EIS/EAs
   * Non-point Source pollution effects must be included;
   * Pesticide use must be evaluated
   * Scientists should establish protocols for testing water quality.

5) Environmental Damage, Liability and Mitigation
Assessment and valuation of reef needs to be developed in order to recover damage to reefs and reef habitats. For example, if a shipwreck occurs on a coral reef, what is the damage to the reef?
   * Need to assess liability.
   * Bonds should be required for people and boats working in these waters.
   * Establish appropriate funds and accounts for coral reef mitigation, restoration, and education.
   * Actions should be culturally and environmentally appropriate.
   * Currently, coral reefs are “a hazard to navigation” and this view needs to be changed. There should be umbrella legislation for coral reefs which recognizes reefs as resources.
   * The Magnuson Act has NMFS review anything affecting fish habitat, and since coral reefs are essential to fish habitat, this does provide some protection for reefs.

6) Essential habitat designation with consultation from the Coastal Zone Management programs.
   * Problem: current top-down management fails to protect habitats.
   * “Essential” designation should be provided in areas of spawning, as well as in areas where the adult of the species live.
   * Currently, all habitat should be designated as “essential” because research has not been done extensively.

7) Involvement of Freely Associated States (FAS)
These islands have expressed interest in the Coral Reef Initiative.
   * Must be clear about activities which include the FSM and other states
   * Clarify protocol for who contacts the freely associated states
   * Share and coordinate information among the U.S. Islands, then send documents to the FAS
   * New web page: Brian Tissot and Mike Hamnett will discuss options for preparing a network on the web to include FAS

8) Other sources of Funding
Bob Richmond developed a list of funding opportunities from private foundations for coral reef projects, which he will share with the other islands.

9) Organizational Issues
* Federal participation - need to build interest in the Congress.
* Pool of coral reef scientists to work in the region - cleaning house.
* Determine a funding program.
* Refer to this group as the U.S. Islands Coral Reef Initiative.

**Future Steps in the U.S. Islands Coral Reef Initiative**

The summary report for the U.S. Islands Coral Reef Initiative Workshop will be used to express regional interest in coral reef management in support of national and international objectives. The projects detailed in the next section will be submitted as a funding package to national agencies to gain support for project implementation. The islands will network and submit these proposals to private foundations and organizations to meet any additional funding needs. These additional efforts will be coordinated by the points of contact for each of the island jurisdictions.

The regional and local managers will continue to develop projects and reassess their current efforts. Project managers have become familiar with lessons learned for application to future programs, as additional funding becomes available. The initiative is envisioned as an ongoing process, evolving to meet the needs of the islands and their coral reef ecosystems.