

Committee on Resources

Subcommittee on Fisheries Conservation, Wildlife and Oceans

Witness Statement

STATEMENT OF MR. ROGER MCMANUS, PRESIDENT, CENTER FOR MARINE CONSERVATION ON THE CORAL REEF CONSERVATION AND RESTORATION ACT OF 1999 (H.R. 2903), BEFORE THE HOUSE RESOURCES' SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS

OCTOBER 21, 1999

Mr. Chairman and members of the Subcommittee, I am Roger McManus, President of the Center for Marine Conservation (CMC). CMC is a national non-profit organization, with 120,000 members, committed to protecting ocean environments and conserving the global abundance and diversity of marine life. Through science-based advocacy, research, and public education, CMC promotes informed citizen participation to reverse the degradation of our oceans. I am pleased to have the opportunity to provide comments on H.R. 2903, as well as the status of coral reefs and the need for additional efforts to conserve and protect these very important resources. In addition, at the request of Rep. Faleomavaega I am providing comments on the Coral Reef Conservation Act of 1999 (S. 725) introduced by Senator Snowe and the Coral Reef Protection Act of 1999 (S. 1253) introduced by Senator Inouye.

I would like to take this opportunity to commend the Chairman for introducing the Coral Reef Conservation and Restoration Act of 1999 (H.R. 2903) and for holding this hearing. It is becoming increasingly clear that our oceans and coastal areas contain irreplaceable resources that benefit all of us. Although increased attention has been given to the oceans and their resources, including coral reefs, over the last several years, relatively little has been done to directly improve coral reef stewardship. Truly historic legislation is needed to both mandate coral reef protection and provide the resources to ensure it. Such legislation richly deserves your efforts and those of your colleagues. The introduction of H.R. 2903 represents a first step toward providing the needed resources to conserve and restore coral reefs. We applaud your efforts to raise the awareness of the degradation of coral reefs and to provide financial assistance to preserve, conserve and restore one of America's most important and threatened natural resources.

SUMMARY OF KEY ISSUES

Prior to discussing the status of coral reefs and the current legislation in more detail, I would like to summarize the following key issues related to coral reefs and coral conservation legislation:

- Coral reef ecosystems, like their more publicized terrestrial analogues, tropical rain forests, possess extraordinary biological diversity, have great value to humans if properly protected, and are rapidly being degraded due to severe and increasing human impacts.
- Some of the world's most important, significant, and extensive coral reef systems, unlike rain forests, are found within the U.S., in both the Atlantic and Pacific Oceans, creating a domestic stewardship

responsibility and demanding a precautionary and protective U.S. response.

- H.R. 2903, S. 725, and S. 1253 all recognize the importance of coral reefs and the need to protect them. These bills provide a good framework for taking an important first step toward more comprehensive protection of U.S. coral reefs, but additional steps will be needed.
- The extensive nature of U.S. coral reefs, their high value, and the increasing threat to them justify a substantial investment in their protection. Given the significant level of reef decline and the time necessary to reverse this trend, the \$100 million provided over five years in S.1253 is easily justified and the most appropriate of the three proposed funding levels.
- Even at the higher funding levels contained in S. 1253, such a grant program should target U.S. domestic reefs primarily, and perhaps adjacent Caribbean reefs that have a strong connection to them secondarily. This recommendation is due to the limited nature of the funding and the importance of addressing U.S. reefs first.
- Given the important role of the Department of Interior (DOI) in protecting U.S. coral reefs, recognized in their Co-chairing of the U.S. Coral Reef Task Force, the Secretary of Interior should have a direct and substantive role in the implementation of this coral reef legislation, especially for coral reefs under (DOI's) jurisdiction.
- The use of a "non-profit foundation" to help implement coral reef legislation may be a useful tool to help leverage private funds to augment scarce federal ones, but such a foundation should be created specifically for this purpose by Congress to avoid conflict of interests and should receive administrative or start-up funding to ensure its success. A similar foundation approach is being considered for marine sanctuaries and there may be merit in merging these.
- This legislation should prioritize funding for activities that most directly protect coral reefs, rather than less direct research and education activities that may support protection indirectly.
- Since the coral reef legislation references the National Marine Sanctuaries Act, I'd like to take this opportunity to thank the Chair for his leadership in moving reauthorization legislation for that important program, but reiterate CMC's concerns that "limitation" language contained in the House-passed bill may unduly limit future sanctuary development, including sanctuaries to protect coral reefs and our hope that this can be addressed before final legislation is enacted.
- CMC recommends that your coral reef bill require the Administration report to Congress by no later than September 1, 2001, on the extent to which the U.S. Coral Reef Task Force is improving protection for U.S. coral reefs and its plans to increase its future effectiveness.
- Finally, CMC would like to recognize the critical need to set aside significant areas (>20%) of coral reef ecosystems and protect them from all extractive use for the successful long-term conservation of natural coral reef systems. Though not directly relevant to any of the pending coral reef legislation, administrative and legislative action to accomplish such protection will be required in order to meet the goals of the proposed legislation.

CORAL REEFS -- BACKGROUND AND STATUS

Coral reefs are among the most diverse and biologically complex marine ecosystems in the world. In the United States, more than 6,500 square miles of the Atlantic and Pacific Oceans contain coral reefs. Coral reef ecosystems are more than just the corals; they are a myriad of interwoven and interdependent habitats and associated organisms. Although they cover only one percent of the entire area of the oceans, they have been dubbed the "rainforests of the sea" because of the great variety of marine species that they support. Coral reefs are home to roughly one-third of the known marine fish diversity and thousands of other species. These underwater rainforests contain an array of potential pharmaceuticals that could provide significant medicinal benefits. Coral reefs also provide critical protection from storms for coastal areas. In addition, they have great economic and aesthetic values including fisheries, diving and tourism.

Despite the ecological and economic importance of coral reef ecosystems, they are globally and domestically threatened by human impacts. Research over the past several decades has documented a decline in the health and quality of coral reef ecosystems. Evidence for this decay includes a reduction in hard coral cover on reefs, reduced biological diversity on reefs, dramatic alterations in reef fish communities, loss of large fish on reefs, degraded water quality, an increase in the frequency and severity of bleaching events, and an increase in coral disease. While some changes in coral reefs are related to natural phenomena, many examples of reef degradation can be traced clearly and directly to human impacts on reef ecosystems.

In the United States, and throughout the world, reefs face a number of detrimental human impacts. Exploitation on coral reefs throughout the world has caused changes in reef fish and invertebrate communities. In the United States, excessive harvesting is the most important factor responsible for dramatic declines in large, predatory fish species such as the Nassau grouper and jewfish, which were once among the most important reef fish species from both economic and ecological vantage points. Many fishing practices also destroy the reef structure itself, causing dramatic changes to reef ecosystems.

Poor coastal and terrestrial land use and development practices can cause an increase in sedimentation and nutrient input to coral reefs and associated habitats. Increased sediments can bury corals, prevent them from feeding or inhibit photosynthesis, killing the coral. Increased sediments can also destroy important seagrass beds and other habitats found in reef ecosystems, and substantially alter fish and invertebrate communities. Increased nutrient input can promote the growth of algae that overgrows or outcompetes corals and seagrasses. Nutrient input may also be responsible for blooms of toxic algae that affect the health of the reef ecosystem and that of human communities that depend on the reef. Other forms of pollution such as pesticides and other chemicals can have similar detrimental effects to corals, and associated fish and invertebrates. In addition to these human impacts that operate on local scales, human impacts that contribute to global climate change are believed to be responsible for mass bleaching events that may wipe out entire reefs on regional and even global scales.

Because reefs are complex and dynamic ecosystems, the effects of various human impacts may not be immediately evident. Nevertheless, they can indeed be detrimental to reef health when coupled with other natural or human induced stresses. For example, overfishing of herbivorous fish did not appear to have a substantial impact on reef ecosystems in the Caribbean until there was a regional die-off of another herbivore, the sea urchin *Diadema antillarum*. The loss of both herbivore guilds resulted in many reefs shifting from being dominated by corals to being dominated by algae. Similarly, because coral reefs have evolved in the presence of hurricanes and other natural stressors, they are relatively resilient to their impact. However, stress from human impacts has reduced this resilience to the point where reefs are often extremely slow to recover from the effect of hurricanes or other natural stresses.

Both domestic and international trade is also negatively impacting coral reefs and their ecosystems. The U.S. is the number one consumer of live corals and marine fishes for the aquarium trade. Coral skeletons and precious corals are used for jewelry. Extraction of corals not only results in a loss of that species, but ultimately in a loss of species dependent upon that reef as well. Although trade is regulated internationally through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), this applies only to endangered and threatened species. The existing trade in live corals, reef fish, and coral products is likely unsustainable. As the major consumer of corals, reef fish, and coral products, the U.S. must help ensure that corals and their ecosystems are not further degraded by an unsustainable trade industry, both domestically and internationally.

EFFORTS TO PROTECT AND CONSERVE CORAL REEFS

The good news is that there are increasing efforts at all levels to focus attention and resources on the plight of coral reefs; the bad news is that globally and domestically coral reefs continue to be threatened. The United Nations declared 1997 the International Year of the Reef and an international plan to conserve corals was developed. Unfortunately, to date, this plan has not yet been implemented nor have U.S. coral reefs received any tangible protection as a result of it.

In 1998, the United Nations Year of the Oceans, the Clinton Administration issued Executive Order 13089, for the Protection of Coral Reefs. E.O. 13089 requires federal agencies to preserve and protect the biodiversity, health, heritage, and social and economic values of U.S. coral reef ecosystems; identify their actions that may affect coral reef ecosystems; utilize their programs and authorities to protect and enhance the conditions of such ecosystems; and ensure that any actions they authorize, fund, or carry out, will not degrade the conditions of such ecosystems. The Executive Order also established the Coral Reef Task Force made up of eleven federal agencies including the Environmental Protection Agency (EPA), the Department of the Interior (DOI), the Department of Commerce (DOC), the Department of Agriculture (USDA) and the Department of Justice (DOJ); and directs the Secretary of State and the Administrator of the Agency for International Development in cooperation with other members of the Task Force, to assess the U.S. role in international trade and protection of coral reefs. The Task Force is working on several important issues including mapping, protected areas, water quality and global warming.

The Task Force has met twice since its creation and is scheduled to meet again in early November. At the second meeting of the Task Force, the Center for Marine Conservation hosted a workshop on the human impacts on coral reefs. The Environmental Protection Agency, the Department of Land and Natural Resources of the State of Hawaii, the Department of the Interior and the Department of Commerce cosponsored the workshop. At the workshop, coral reef ecologists agreed that while there was much left to learn about coral reef biology, enough is already known to indicate that stronger protection measures are needed and cannot be delayed. They agreed that these systems are currently not well protected, making them vulnerable to exploitation and other threats and that providing protection up-front, before degradation occurs, is both more cost-effective and more likely to succeed than restoration efforts, once damage has occurred. Recommendations were made that significant areas of coral reef ecosystems be set aside and protected from all extractive activities. CMC will host another workshop on November 1, that will focus on current levels of protection from key threats to U.S. coral reef ecosystems and will coincide with the Task Force's next meeting in St. Croix.

CMC has been actively involved in protecting and conserving the coral reefs of the Wider Caribbean Region, including those in U.S. waters. These coral reefs are some of the most beautiful and biologically diverse marine communities in the entire Atlantic Ocean. Unfortunately, these reefs are experiencing

significant degradation as a result of pollution and overfishing. CMC initiated its Caribbean Reef Campaign in 1997 to raise awareness, strengthen environmental policies and promote local action to stop the human activities that harm coral reefs. The goal of this Campaign is to work with governments, scientists, coastal communities and the private sector to understand and stop the loss of coral reef biodiversity resulting from pollution and over fishing.

Some highlights of CMC's recent work to protect coral reefs include: (1) Conducting research to document the values of Navassa Island and its surrounding marine environments and establishing a scientific monitoring program to detect change in those values in support of its recent designation as a National Wildlife Refuge; (2) Conducting research to establish the importance of the remote Dry Tortugas section of the Florida Keys, including the critically important spawning area known as Riley's Hump, and participating in a consensus-based proposal to protect portions of this area as the Dry Tortugas Ecological Reserve; (3) Building support for increased protection of the coral reef ecosystems of the Florida Keys, Flower Garden Banks, and other National Marine Sanctuaries; (4) Advocating on behalf of protecting other reef fish spawning aggregation areas including the proposed Gag Grouper Closed Area in the Gulf of Mexico and the proposed Red Hind Marine Conservation Area in the U.S. Virgin Islands; (5) Working to strengthen and expand protection for coral reef ecosystems in the U.S. Virgin Islands through the National Park System; and (6) Assisting Wider Caribbean governments from the Bahamas to Columbia in efforts to protect their coral reef systems.

CORAL REEF LEGISLATION

I would like to take this opportunity to provide our comments on the three coral reef bills that are the focus of today's hearing. I will comment on the specific legislative proposals and then provide CMC's recommendations for achieving more comprehensive coral reef protection.

H.R. 2903

As I mentioned earlier, we appreciate the efforts of the Chairman to raise the awareness of coral reefs by introducing H.R. 2903. By authorizing \$50M over five years, H.R. 2903 would provide significant financial resources necessary to further efforts to conserve and restore these important areas and aid in the effort to prevent coral reefs from going extinct.

CMC is pleased that H.R. 2903 recognizes that conservation of coral reefs needs to include assistance in the development of management strategies for marine protected areas that are consistent with the National Marine Sanctuary Act and the Magnuson-Stevens Fishery Conservation and Management Act. The competitive grant process established in H.R. 2903 would provide on the ground support for conservation and restoration efforts by allowing government and non-government entities at local, state and territory levels, as well as non-governmental institutions to receive funds. These monies would among other things implement conservation programs for corals and provide much needed information on the status and threats to coral reefs. CMC is pleased to see that priority will be given to projects ensuring effective, long-term conservation or restoration of coral reefs. At this point, I would also suggest that the H.R. 2903 be amended to give the highest priority to proposals aimed at providing tangible coral reef protection over proposals that may aid or support such concrete protection.

In addition, CMC would ask that you consider providing a direct role for the Department of the Interior in the implementation of your coral reef legislation, especially for coral reefs under their jurisdiction. DOI has significant responsibilities related to coral reef protection including management responsibilities for coral

reefs in national parks, national wildlife refuges and remote U.S. insular areas, territories and possessions. DOI protects important coral reef areas at more than two dozen parks and refuges, collectively amounting to more than 1,786,000 acres of coral reefs and submerged lands. DOI also has management authority for other large coral reef areas within the unincorporated insular areas of the Pacific. Some of these remote island locations may be the last, best hope for protecting natural coral reef systems or coral reef

wilderness within the U.S. or Central Pacific region. Furthermore, the Secretary of Interior is a co-chair of the U.S. Coral Reef Task Force that was formed to implement the Executive Order on coral reefs. Given DOI's responsibilities, it is more than appropriate that they be given a role in the implementation of any coral reef legislation.

S. 725 and S. 1253

Per the request from Representative Faleomavaega, I would like to take this opportunity to provide comments on the coral reef legislation introduced in the Senate. CMC would like to express our appreciation and recognize the leadership of Senator Snowe and Senator Inouye for developing measures to improve the protections provided to U.S. coral reefs. Both the Coral Reef Conservation Act of 1999 (S. 725) introduced by Senator Snowe and the Coral Reef Protection Act of 1999 (S. 1253) introduced by Senator Inouye represent positive steps forward in addressing the need to protect and conserve U.S. coral reefs. These two pieces of legislation represent a good framework for developing stronger and more comprehensive coral reef legislation. Both bills would facilitate an increased understanding both by the public and scientists of the threats to coral reefs and the condition of corals reefs.

Both S. 725 and S. 1253 provide critically needed financial resources to conserve and protect coral reefs. S. 725 would provide \$12M over a three year period while S. 1253 would provide \$100M over a five year period. Both pieces of legislation also establish a competitive grant program that provides funds to both government and non-government entities at local, state and territory levels, as well as to educational and non-governmental institutions. By providing on the ground resources S. 725 and S. 1253 will help facilitate protection of specific reefs. S. 725 and S. 1253 also require that at least 80 percent of the monies available under the grant program go to conservation projects in the Pacific Ocean, Atlantic Ocean, the Gulf of Mexico and Caribbean Sea.

Given significant declines in coral reef ecosystems and the time necessary to reverse this trend, we prefer the funding levels provided in S. 1253. We believe that such a significant increase is necessary to help stem the decline of coral reefs and coral reef ecosystems. S. 1253 also creates a national program allowing NOAA to provide non-competitive grants. The national program established under S. 1253 would also allow the Secretary to participate in joint projects that facilitate international programs to conserve, study and protect coral reefs and coral reef ecosystems. This would allow for a more comprehensive system of protection and monitoring of coral reefs. CMC also believes that by requiring the Secretary of Commerce to consult with the Coral Reef Task Force on project proposals and approvals S. 1253 establishes a more cohesive process for restoring and conserving coral reefs.

Both S. 725 and S. 1253 would allow the Administrator and/or Secretary to enter into an agreement with an outside organization/Foundation to control funds for the Coral Reef Conservation Fund and solicit donations. CMC believes that it would be more appropriate for a separate Foundation to be established that would use matching federal grants to undertake strategic projects aimed at promoting conservation, restoration and protection of coral reefs and marine protected areas; with a focus on preserving the ecological and economic values of U.S. coral reefs.

RECOMMENDATIONS FOR COMPREHENSIVE PROTECTION OF CORAL REEFS

CMC applauds the sponsors of H.R. 2903, S. 725 and S. 1253, for raising awareness of the plight of coral reefs and for providing much needed financial support to further the conservation and restoration of coral reefs. However, I would like to take this opportunity to suggest that much more needs to be done if we are going to protect coral reefs and stop future degradation of these important natural resources. The following are suggestions for achieving a more comprehensive and permanent system of protection for coral reefs:

CMC's Agenda for the Oceans recommended establishing an independent Coral Reef Commission to evaluate priority threats to U.S. Coral reefs including overfishing and nutrient pollution, and make scientific recommendations on how to reduce those threats. The President's Executive Order creating the Coral Reef Task Force provides a similar, but less independent, mechanism to accomplish similar objectives. CMC recommends including in your coral reef legislation a requirement that the Administration report to Congress by no later than September 1, 2001, on how the Task Force and Executive Order are improving protection of U.S. coral reefs and its plans to increase future effectiveness.

#