

FISHERIES MANAGEMENT IN THE CARIBBEAN: CONCERNS, SOLUTIONS, AND CHANGING GOVERNMENT REGULATIONS

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I. INTRODUCTION

The passage of the Magnuson Fishery Conservation and Management Act (FCMA or Magnuson Act),¹ in April of 1976, marked the beginning of intense federal government involvement in the regulation of fisheries.² The Magnuson Act, passed in an era of increasing foreign fishing dominance, sought to protect the American fishing industry from foreign fishing operations within the jurisdiction of the United States.³ This was accomplished by the development and regulation of the U.S. Exclusive Economic Zone (EEZ; formerly known as the Fishery Conservation Zone or FCZ), a zone extending from the seaward boundary of each coastal state to a range of 200 nautical miles offshore.⁴

In some respects, the Magnuson Act has been a tremendous success; since 1976, the fishing industry in the United States has grown to immense proportions. In 1990, landings exceeded four million tons and

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1. 16 U.S.C. §§ 1801-1882 (1988 & Supp. 1993). Originally named the Fishery Conservation and Management Act, in 1980 the Act was renamed by Pub. L. No. 96-561, § 238, 94 Stat. 3300 (amending 16 U.S.C. § 1801), to honor the late Senator Warren G. Magnuson of Washington, who had been the Act's original Senate sponsor. See Catherine Decker, *Issues in the Reauthorization*, 1 OCEAN & COASTAL L. J. 323 (1995).

2. Eldon V.C. Greenberg, *II. Harvesting, Chapter 7, Ocean Fisheries, SUSTAIN. ENVTL. L.* § 7.1 (1993).

3. *Id.*

4. See Decker, *supra* note 1, at 323; EEZ definition taken from the National Marine Fisheries Service (NMFS) Internet resource, at <http://kingfish.ssp.nmfs.gov/FUS92/mfcma>. The FCMA also provides for the management of resources and anadromous species beyond the EEZ, except those within the territorial waters of another country, or other conservation zones, recognized by the United States. *Id.*

were valued at more than three and one-half billion dollars.⁵ In the same year, those commercial fisheries contributed 16.6 billion dollars to the gross national product.⁶ Marine recreational fishing has also flourished; for example, in 1990 an estimated seventeen million recreational fishers caught roughly forty million fish off the Atlantic and Gulf coasts alone.⁷

On the other hand, the Magnuson Act has not been an unqualified success. American fishers have replaced foreign fishers, but many fisheries managed by the FCMA have been badly overfished, and others are overcapitalized.⁸ The success of the FCMA in promoting domestic fishing has created a situation in which too many fishers, with excessive amounts of often-inefficient equipment, are competing for increasingly scarce marine resources.⁹

The most recent authorization for appropriations under the Magnuson Act lapsed in September of 1993; reauthorization, probably late this summer, offers an opportunity for amendment to address some of the concerns which have surfaced.¹⁰

II. MANAGEMENT CONCERNS IN THE CARIBBEAN REGION

The Caribbean region defined by the Magnuson Act's regional division faces a somewhat unique challenge as tourism becomes increasingly important to the regional economies of the Caribbean. Coral reefs and the wildlife they support are a significant asset in the tourist industry, and as a resource they are threatened by an increased volume of visitors and fishers alike. While pollution levels in the region are lower than those of the more densely populated Northeast, fragile reefs are extremely vulnerable to erosion and pollution, both of which increase as humans and their activities proliferate.¹¹ Beyond their value to the tourism industry, coral reefs are also an important sea-life habitat, the destruction of which threatens many species not directly endangered.¹²

5. Greenberg, *supra* note 2. (citing NMFS, Fisheries of the United States 1990 iv (May 1991) figures of 4.4 million metric tons and \$3.6 billion).

6. *Id.*

7. *Id.*

8. Decker, *supra* note 1, at 323.

9. *Id.*

10. *Id.*

11. Telephone Interview with Mr. Virdin C. Brown, Member of the Caribbean Fishery Management Council, Department of Planning and Natural Resources (May 16, 1996).

12. *Id.*

One important goal of the Caribbean Fishery Management Council (CFMC) is the protection of this "pristine and fragile environment."¹³

Other prominent concerns of the CFMC, as of nearly every other council, are overfishing and inefficiency.¹⁴ Inefficiency is a problem both because of overcapitalization, resulting from the high numbers of fishers, and because of particular fishing methods.¹⁵ An example of one such method common in the Caribbean is the practice of "pot" or "trap" fishing.¹⁶ Fish traps or "pots" used to be employed by fishers near the coastline; as fish have become more scarce and competition increased, the trap fishing has moved out into the EEZ.¹⁷ The method is largely unselective, and thus poses two main efficiency concerns: bycatch (the trapping of unwanted prey, wasting resources and threatening protected species), and destruction of breeding stock (by trapping high numbers of juvenile fish and depleting the reproductive stock).¹⁸ While there is less large-scale commercial fishing in the Caribbean region in contrast to other regions under the FCMA, the abundance of smaller-scale fishing maintains these concerns.¹⁹

III. CURRENT MANAGEMENT & REAUTHORIZATION

The CFMC has several Fishery Management Plans (FMPs) in place. Among these are FMPs governing reef fish, spiny lobster, and queen conch. Coral resources are also currently managed by a FMP devised by the Council. In particular, this FMP protects coral "monuments" in the EEZ, mapped formations and habitats known to the CFMC.²⁰ While similar management plans have been attempted in the Pacific regions, the CFMC's coral FMP appears to be enjoying more success than its predecessors.²¹

13. *Id.*

14. *Id.*

15. *Id.*

16. Telephone Interview with Ms. Georgia Cranmore, Designee of the Caribbean Fisheries Management Council, Fisheries Operations Branch, Southeast Regional Office, NMFS (Mar. 20, 1996).

17. Brown, *supra* note 11.

18. *Id.*

19. Cranmore, *supra* note 16. Bycatch problems are primarily associated with high seas fisheries, such as Swordfish. *Id.*

20. Brown, *supra* note 11.

21. *Id.*

The CFMC has approached the overfishing problem primarily by limiting entry into the EEZ through the use of license requirements.²² Inefficiency is addressed both by licensing requirements, limiting access to the EEZ and consequently limiting the number of fishers, and by regulating the type of equipment permitted. For example, the Council has required larger mesh, which permits smaller (juvenile) fish to slip through. The Council has also restricted the type and number of hooks used.²³ Efficiency concerns are also addressed by the regulation of habitat, particularly spawning grounds; changes proposed for the Magnuson reauthorization include increased Council responsibility for fisheries habitat.²⁴ Council members have expressed the view that increased authority in this area will better enable them to protect fishing stocks.²⁵

IV. CONCLUSION

For the most part, commentators and council members alike seem to agree that the Magnuson Act “contains the tools for effective management and conservation of the U.S. fisheries resource.”²⁶ Drastic change is not needed; perhaps the most useful alterations to the FCMA would be procedural safeguards to ensure that management has the resources and authority to carry out its responsibilities. The mere mention of policy concerns in support of habitat protection should help focus the energies of the regional councils. In many respects, the Magnuson Act provides the framework for effective long-term fisheries management; the real world difficulties of administration and enforcement, however, often undercut the potential effectiveness of the FCMA. An increased focus on policy concerns, made explicit in the FCMA, as well as increased responsibility and authority in habitat regulation, should ensure the continued success of both the Magnuson Act and fisheries management in the Caribbean.

22. *Id.*

23. *Id.*

24. Cranmore, *supra* note 16.

25. *Id.*

26. Decker, *supra* note 1; Brown, *supra* note 11.