The Pew Oceans Commission Report: 
Navigating a Route to Sustainable Seas

Kathryn J. Mengerink*

"The oceans are in trouble. Our coasts are in trouble. Our marine resources are in trouble... all, perhaps, in serious trouble."

—U.S. Commission on Ocean Policy

Current ocean governance in the United States is in part a product of a 1969 U.S. congressional commission report on the status of the nation's oceans and how best to manage marine resources. The Pew Oceans Commission recently issued a report addressing the state of our nation's marine resources and recommended major changes in ocean governance at the federal level. Recommendations include the creation of a new independent ocean agency that would coordinate and oversee all ocean agencies and activities through the creation of regional ocean ecosystem councils focused on the goal of marine conservation. The Pew Commission also recommends specific changes in the current regional fishery management scheme. Large scale changes in governance structure would create a more coordinated and cohesive ocean management system. Smaller scale changes in fishery management would result in stripping much of the power away from regional fishery management councils, but could result in a more opaque system that would lack the necessary support of the fishing community. In spite of these potential problems, the Pew Commission report provides a comprehensive evaluation of the ocean's

* J.D. candidate, University of California at Berkeley School of Law (Boalt Hall), 2005; Ph.D., Scripps Institution of Oceanography, University of California, San Diego, 2001; B.S., Texas A&M University at College Station, Texas, 1996. I would like to thank Professor Harry N. Scheiber for giving me the opportunity to explore ocean law and policy and the Pacific Rim Research Program and the Law of the Sea Institute for providing me with financial support. Also, I would like to thank Professor Bob Infelse, Emma Garrison, Kate Daniels, and especially Jocelyn Garovoy for their editorial comments and suggestions.

living resources and valuable recommendations that should be considered when determining how best to conserve and protect our fisheries and other ocean resources.

Introduction

I. The Current Management Regime: A Tangled Net of Agencies, Laws and Regulations

A. Ocean Governance at the International, National, & Local Level

B. Federal Regulation of Fisheries

1. The National Marine Fisheries Service

2. The Regional Fishery Management Councils Create Specific Plans for Each Fishery

   a. Fishery Management Plans

   b. The Membership of the Regional Fishery Management Councils

C. Federal Regulations to Protect Endangered Ocean Species and Coastal Resources

1. NMFS Administers the Endangered Species Act and the Marine Mammal Protection Act

2. The National Ocean Service Administers the National Marine Sanctuaries Act

II. The Pew Report

A. The Pew Report Recommends New Values to Address Current Ocean Problems

B. The Pew Report Recommends Reorganizing Federal Ocean Governance

C. The Pew Report Recommends Changing Fisheries Regulation

III. Evaluation of Recommendations

A. New Values: Shifting the Focus in Fisheries Management

   1. Fishing Below the Maximum Sustainable Yield

   2. Ecosystem Management

   3. Goal of Conservation, Not Economic Gain

B. Strengthening the System at the Federal Level

   1. Creating an Independent Ocean Agency

   2. Creating an Interagency Council

C. Fisheries Management and the Fate of the RFMCs

   1. Reducing the Role of the RFMCs by Creating Regional Ecosystem Councils

   2. Reducing the Role of RFMCs by Separating Conservation and Allocation Decisions

   3. No Change in the Membership of RFMCs
INTRODUCTION

There has been a long-held belief in freedom of the high seas—the ocean is a commons, owned by no one, and therefore exploitable by everyone. This notion was once easy to accept, because the ocean was thought to be limitless in its resources. While freedom of the high seas still prevails in some respects, the world’s oceans are increasingly regulated and controlled. This increasing control is in part due to concerns such as depletion of once bountiful fisheries, fear of environmental disaster due to oil spills or other sources of pollution, and the discovery of valuable offshore mineral resources.

In 1969, a U.S. ocean commission created by Congress and known as the Stratton Commission addressed many of these issues in its report, Our Nation and the Sea. Congress charged the Stratton Commission with examining current and future ocean issues, creating a “comprehensive, long-term national program,” and “recommend[ing] a plan of government organization” to support the program. While not all recommendations were heeded, Our Nation and the Sea resulted in the passage of the 1972 Coastal Zone Management Act (CZMA)—the basis of coastal management today—and the creation of the U.S. National

2. See, e.g., Jon M. Van Dyke, Sharing Ocean Resources—In a Time of Scarcity and Selfishness, in LAW OF THE SEA: THE COMMON HERITAGE AND EMERGING CHALLENGES 3 (Harry N. Scheiber ed., 2000) (the concept of freedom of the high seas has been attributed largely to the writings of the Dutch jurist Hugo Grotius).


7. Hinkel, supra note 6, at 5.
Oceanic and Atmospheric Administration (NOAA)—the main federal agency regulating U.S. oceans.

Over thirty years have passed since the Stratton Commission issued its report. In the meantime, major changes have placed additional pressure on ocean resources, including population growth (leading to greater demand for ocean resources), technological advancement (enabling exploitation of previously unavailable resources and increasing exploitation efficiency of available resources), and a globalized economy (creating increased competition for shared resources).

Today our nation has two new reports regarding the status and future of our oceans by two independent commissions: a new U.S. Commission on Ocean Policy (U.S. Commission) and the Pew Oceans Commission (Pew Commission).

With the passage of the Oceans Act of 2000, Congress created a new U.S. Commission on Ocean Policy (U.S. Commission), with the purpose of making "recommendations for a coordinated and comprehensive national ocean policy that will promote" human safety, commerce, science, technology and ecosystem protection. The broad mandate of the U.S. Commission is similar in breadth to the Stratton Commission's mandate thirty years earlier. Recently, the U.S. Commission released its final report, which addresses many of the same issues presented by the Pew Commission.

The Pew Charitable Trusts established the Pew Oceans Commission (Pew Commission), with the objective of developing "recommendations for a new national policy to restore and protect ocean and coastal ecosystems and to maintain the many benefits the oceans provide." The Pew Commission was able to claim its report, America's Living Ocean: Charting a Course for Sea Change, as "the first of its kind in more than 30 years."
years," with its June 3, 2003, release.\textsuperscript{14} This report provides an in-depth look at the problems facing the oceans including, for example, pollution, overfishing, poor management, and lack of scientific knowledge. Several supporting documents accompany the 144-page report, resulting in a comprehensive analysis of the marine resource management issues facing our nation.\textsuperscript{15}

This Comment will focus specifically on the recommendations made by the Pew Commission regarding the structure of federal ocean governance, and fisheries management.\textsuperscript{16} Section I summarizes the current structure of federal ocean governance and fisheries management. Section II summarizes the Pew Commission's recommendations relating to the structure of federal ocean governance and fishery management. Section III evaluates the Pew Commission's recommendations in light of the Stratton Commission and the new U.S. Commission reports. This Comment concludes that, while some recommendations should be modified in order to increase the legitimacy and transparency of the current management system, most of the recommendations should be adopted in order to preserve and conserve our marine resources.

I. THE CURRENT MANAGEMENT REGIME: A TANGLED NET OF AGENCIES, LAWS AND REGULATIONS

It is impossible to understand the potential ramifications of implementing the recommendations made by the Pew Commission without first understanding the current ocean management regime. The following section will provide a brief overview of the federal fisheries management system and highlight some of the major areas of contention.


\textsuperscript{15} In addition to the final report are the following reports: DONALD F. BOESCH, ET AL., MARINE POLLUTION IN THE UNITED STATES: SIGNIFICANT ACCOMPLISHMENTS, FUTURE CHALLENGES (2001); REBECCA J. GOLDBURG ET AL., MARINE AQUACULTURE IN THE UNITED STATES: ENVIRONMENTAL IMPACTS AND POLICY OPTIONS (2001); JAMES T. CARLTON, INTRODUCED SPECIES IN U.S. COASTAL WATERS: ENVIRONMENTAL IMPACTS AND MANAGEMENT PRIORITIES (2001); PAUL K. DAYTON ET AL., ECOLOGICAL EFFECTS OF FISHING IN MARINE ECOSYSTEMS OF THE UNITED STATES (2002); MANAGING MARINE FISHERIES IN THE UNITED STATES (2002); STEPHEN PALUMBI, MARINE RESERVES: A TOOL FOR ECOSYSTEM MANAGEMENT AND CONSERVATION (2002); A DIALOGUE ON AMERICA'S FISHERIES (2003); AND SOCIOECONOMIC PERSPECTIVES ON MARINE FISHERIES IN THE UNITED STATES (2003), available at http://www.pewoceans.org (last visited June 24, 2004).

\textsuperscript{16} It is beyond the scope of this Comment to discuss all aspects of the Pew Oceans Commission Report, which includes discussions of areas such as coastal preservation, pollution, development, aquaculture, education and science. The Pew Commission identifies causes of coastline decline. AMERICA'S LIVING OCEANS, supra note 12. These issues only add to the complexity of the ocean resources problem. Proper solutions should take this complexity into account and at the same time create a more simplified and cohesive system of marine resource management.
A. Ocean Governance at the International, National, & Local Level

Ocean governance occurs at the international, national, and local level. At the international level, the United Nations Law of the Sea Convention establishes rules for all nations, such as the allowance of a 200-mile exclusive economic zone (EEZ) for coastal states, navigational rights and freedom of passage, and regulations for shipment of hazardous materials. Today most coastal countries claim a 200-mile EEZ, leaving approximately sixty percent of the world's oceans as high seas. While nations have the power to regulate ships flying their flag anywhere on the ocean, theoretically no nation controls the high seas waters and resources within.

However, even high seas are regulated to some extent by international management organizations. In addition to the Law of the Sea Convention, the United Nations Food and Agriculture Organization—a global organization with over 180 member nations—regulates world fisheries through treaties and recommendations. Smaller, multi-national regional fisheries management organizations address fisheries issues in specific regions of the ocean. These international treaties and resolutions lead to U.S. fisheries management obligations. For example, the International Commission for the Conservation of Atlantic Tunas is a regional fisheries management organization whose management decisions affect the U.S. Atlantic tuna fishery.

In the United States, coastal states have territorial jurisdiction, and thus control fishing, from land to three miles offshore. From three to 200 miles, eight regional fishery management councils (RFMCs) regulate...
fishing under federal jurisdiction. Beyond 200 miles, on the high seas, the National Marine Fisheries Service (NMFS) regulates United States fishing vessels. This means that as a United States vessel travels from shore to the high seas, it will pass through waters controlled by the state, the RFMCs, and the NMFS. In addition to U.S. regulation, international and multilateral regional agreements can affect fishing vessel activity.

While fishermen have the benefit of global positioning systems to tell them which laws govern at any spot on the water, fish are unaware of such boundaries. Spawning grounds and juvenile habitat may be near shore in state territory, while adults may reside in the EEZ or on the high seas. In fact, some highly migratory species, such as tuna, are known to traverse the entire expanse of an ocean basin. Effectively managing marine species requires comprehensive management within and between jurisdictions—ideally with collaboration between the states, the nation, and the international community. Unfortunately, the current U.S. ocean management regime is far from comprehensive, and it lacks the cohesion necessary to effectively manage marine resources.

B. Federal Regulation of Fisheries

1. The National Marine Fisheries Service

Congress created the National Oceanic and Atmospheric Administration (NOAA) in 1970 as a result of the Stratton Commission report. President Richard Nixon stated that NOAA would serve a national need "for better protection of life and property from natural hazards . . . for a better understanding of the total environment . . . [and] for exploration and development leading to the intelligent use of our
marine resources.” Today, NOAA is one of thirteen Bureaus in the Department of Commerce, and is responsible for conducting ocean and atmospheric research and for applying that research to science and service.

The National Marine Fisheries Service (NMFS) is one sub-agency within the NOAA. Mandated by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act or Act), NMFS regulates and manages the fisheries within the United States EEZ. In the early 1970s, concerns that foreign fishing fleets were exploiting fisheries along the United States coast led to the passage of the Magnuson-Stevens Act. The Act claimed a fishing zone extending from the shoreline to 200 miles out to sea for the sole use of the United States. While the Act was successful in removing foreign competition, its ability to create effective domestic fishery management has received much criticism. In 1996, in recognition of “continued overfishing; lack of coordination between councils [RFMCs] and the Federal Government; lack of accountability; inconsistency in State and Federal management measures; and adoption of unenforceable management measures,” Congress amended the Act by passing the Sustainable Fisheries Act. The Sustainable Fisheries Act amendments address conservation concerns by defining new conservation terms (such as essential fish habitat) and adding new national conservation standards. For example,
one important new standard encourages fisheries management plans to address reduction of bycatch and to minimize bycatch mortality.\textsuperscript{40} The amendments, however, have been largely ineffective in shifting the underlying management goal from one of immediate economic gain to a one of conservation and sustainability.

2. \textit{The Regional Fishery Management Councils Create Specific Plans for Each Fishery}

The Magnuson-Stevens Act creates a system of bottom-up fisheries management. At the top, the ultimate authority for national fisheries management rests with the Secretary of Commerce, who delegates its authority to NMFS.\textsuperscript{41} RFMCs are regional management bodies within NMFS that represent and manage eight coastal regions of the U.S. EEZ.\textsuperscript{42} They are the heart of the U.S. fisheries management system.

a. \textit{Fishery Management Plans}

RFMCs are responsible for holding public hearings, submitting reports, assessing and making recommendations on the optimal sustainable yield for their fisheries, proposing regulations, and most importantly preparing and amending fishery management plans for each fishery under the RFMC's control.\textsuperscript{43} A fishery management plan regulates a particular fish stock, by species or group of species. For example, at one end of the spectrum, the Herring Fishery Management Plan regulates only the catch of herring in the Northeast Atlantic. At the other end of the spectrum, the Snapper-Grouper Fishery Management Plan manages over seventy-three species of groundfish in the South Atlantic. Fisheries management plans are to be designed in compliance with ten National Standards,\textsuperscript{44} which speak of conservation but in reality

\footnotesize
40. \textit{Id.} "Bycatch" is defined by the Magnuson-Stevens Act as "fish which are harvested in a fishery, but which are not sold or kept for personal use.... Such term does not include fish released alive under a recreational catch and release fishery management program." 16 U.S.C. § 1802(2).
42. \textit{Id.} at § 1852(a). \textit{For an in-depth analysis and evaluation of the regional councils, see Josh Eagle et al., Taking Stock of the Regional Fishery Management Councils} (2003).
43. 16 U.S.C. § 1852 (h).
44. The ten National Standards are:

(1) Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

(2) Conservation and management measures shall be based upon the best scientific information available.
mandate maximum economic benefit. NMFS has the authority to approve or disapprove a plan, and, if disapproved, the RFMC may submit a revised plan.

Fishery management plans are criticized for allowing fishing to exceed scientifically recommended levels, which can lead to overfishing.

(3) To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

(4) Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

(5) Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

(6) Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

(7) Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

(8) Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

(9) Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

(10) Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

Id. at § 1851(a).

45. National Standard 1, which mandates "achieving, on a continuing basis, the optimum yield," takes precedence over the other nine National Standards. EAGLE ET AL., supra note 42, at 13-14. Also, National Standard 1 has been recognized as contributing to the continued overfishing problem, and a NMFS working group is currently considering how to revise the standard. See Marine Fisheries Advisory Summary Report, Dec. 9-11, 2003, at http://www.nmfs.noaa.gov/MAFAC_Info/december2003.htm. See also Burr Heneman, Federal Fishery Laws: New Model Needed to Sustain Fisheries and Ecosystems, in MANAGING MARINE FISHERIES IN THE UNITED STATES, supra note 14, at 2.

46. 16 U.S.C. § 1854(a); see also EAGLE ET AL., supra note 42, at 14 (discussing the discretion that the RFMCs enjoy).

47. 16 U.S.C. 1854(a). For example, an amendment to the Fishery Management Plan for the Snapper-Grouper Fishery for commercial trip limits for amberjack was originally rejected and later approved after resubmission of a revised amendment. See Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Snapper-Grouper Fishery off the Southern Atlantic States; Resubmission of Disapproved Measure in Amendment 9, 65 Fed. Reg. 55203-01 (Sept. 13, 2000).
and ultimately depletion. Also, fishery management plans are criticized because they manage single species rather than ecosystems. Problems attributed to single-species management include lack of consideration of significant ecosystem effects of commercial fishing such as habitat destruction and bycatch. In fact, target species in one fishery can be bycatch in another. For example, the Gulf Coast red snapper is a major target fish for commercial and recreational fishermen in the Gulf of Mexico and is listed by NMFS as overfished. Yet juvenile red snapper make up a large percentage of the shrimp fishery bycatch, and, according to NMFS, "even if the directed fisheries for adult red snapper were eliminated, the bycatch of juvenile red snapper in shrimp trawls would still need to be reduced significantly for the adult spawning stock to recover under the [Gulf of Mexico Fishery Management Council] rebuilding schedule."

b. The Membership of the Regional Fishery Management Councils

The problems attributed to fishery management plans may ultimately be the product of the structure and composition of the regional fishery management councils. Each RFMC consists of coastal states and includes both non-voting and voting members. The voting council is comprised of the principal state marine fishery official for each state in the region, the regional director of NMFS (the only federal member of the council), and "members... appointed by the Secretary... who, by reason of their occupational or other experience, scientific expertise, or training, are knowledgeable regarding the conservation and management, or the commercial or recreational harvest, of the fishery resources of the geographical area concerned."

48. Overfishing is defined as the "mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis." 16 U.S.C. § 1802(29).
51. Id.
53. See infra, next section (Part 1 Section B(2)(b)).
54. One exception to this is the Pacific Council, which includes Idaho.
55. 16 U.S.C. § 1852 (c), including the regional director of the United States Fish and Wildlife Service, the regional commander of the Coast Guard, the regional Executive Director of the Marine Fisheries Commission, and a representative from the Department of State.
56. Id. at § 1852 (b).
57. Id.
This last category of voting members includes stakeholders such as commercial and recreational fishermen, fish processors and other individuals with a vested interest in the resource—and it is this non-governmental category of voting member that gives rise to the most controversy surrounding the RFMC system. Commercial and recreational fishing interests hold the vast majority of the non-governmental positions on RFMCs, to the exclusion of other interested parties. For example, the Gulf of Mexico Fishery Management Council has seventeen members. Of the non-government members, six are recreational fishermen, four are commercial fishermen and only one is listed as “other.” Since 1985, it is estimated that eighty to ninety percent of appointments went to stakeholders. Rarely are other types of members selected, such as academics, environmentalists, scientists, and tribal representatives. In this way, stakeholders have undue influence over fishery management, while many other affected groups are not represented.

Membership on RFMCs is important because the councils are the main drafters of fisheries management plans, and NMFS typically defers to the RFMCs decisions. RFMCs are in charge of determining both the total allowable catch for the year and the allocation of that catch. Including stakeholders as representatives in fisheries management has been justified as an effort to create a system where those with the most knowledge would be able to contribute. Also, there was a belief that those with an interest in exploiting the resource would also have an interest in conserving that resource. However, inclusion of commercial and recreational fishing interests to this extent in the decision-making process is problematic. When faced with setting the total allowable catch, voting members of the RFMCs, driven by economic interests, often choose to increase the allowable catch above scientifically recommended levels. Even if the voting members are not motivated by the potential for personal economic gain, there is a perception that their actions are economically-motivated and self-interested. As Senator Kerry noted, “[i]n some regions... the council members are no longer perceived as

58. Discussed infra next section (Part I Section B (2)(c)).
60. EAGLE ET AL., supra note 42, at 2.
61. EAGLE ET AL., supra note 42, at 11.
63. Cloutier, supra note 62, at 119-121.
64. Id. at 21-22.
stewards of the public resource . . . but are seen as protectors of special economic interests.”65 Thus, if nothing else, the system lacks legitimacy. As one scholar noted, it is “a failed experiment in allowing the most active participants in an industry exploiting a public trust resource to manage and regulate that resource.”66

C. Federal Regulations to Protect Endangered Ocean Species and Coastal Resources

1. NMFS Administers the Endangered Species Act and the Marine Mammal Protection Act

NMFS is charged with administration of the Endangered Species Act67 as it pertains to marine life (listing species and creating recovery plans) and the Marine Mammal Protection Act.68 For fisheries that are known to affect any species listed under either the ESA or MMPA, fishermen must apply for an “incidental take” permit, as well as comply with specific regulations that deal with marine mammals or endangered species.69

Within NMFS, the Office of Sustainable Fisheries is responsible for implementing fisheries law and regulations, and the Office of Protected Resources is responsible for implementing the Endangered Species Act and the Marine Mammal Protection Act. Conflicting responsibilities and lack of cohesion have led to clashes between these organizations.70 In fact, one recent NOAA report commented that a cultural gap exists between the two offices caused by “[Sustainable Fisheries] staff who think that [Protected Resource] staff are a bunch of ‘tree huggers’ and by [Protected Resource] staff who think that [Sustainable Fisheries] staff are good-ole boys who happen to have a degree in fisheries.”71 These conflicts are within one NOAA sub-agency – NMFS. Conflicts also exist between NOAA sub-agencies, as described below.

65. See Annotated Guide, supra note 36, at 309.
71. Id. at 2.
2. The National Ocean Service Administers the National Marine Sanctuaries Act

Also housed within NOAA is the National Ocean Service, whose mission is to "preserve and enhance the nation's coastal resources," while at the same time ensuring sustainable development. The National Ocean Service includes the National Marine Sanctuary Program established by the National Marine Sanctuaries Act (NMSA). The NMSA allows the Secretary of Commerce to designate marine sanctuaries in areas that are of "special national significance." In designating an area, the NMSA requires the Secretary to consider factors such as biological qualities, historical significance, and potential use of the area, including commercial and recreational fishing. This process has resulted in the establishment of only thirteen marine sanctuaries since the NMSA was enacted in 1972. The National Ocean Service is also involved in establishing Marine Protected Areas—areas established to provide full or partial protection of natural or cultural resources. Together, these programs have resulted in the cumulative protection of less than one percent of U.S. oceans.

Conservation programs such as the National Marine Sanctuaries program are at odds with the mandate of the Magnuson-Stevens Act. While the Act requires regulating fisheries to ensure maximum economic benefit, the National Marine Sanctuary Program's goal is to "to serve as the trustee for the nation's system of marine protected areas, to conserve, protect, and enhance their biodiversity, ecological integrity and cultural legacy." Conflicts arise when designated sanctuaries are also favored fishing grounds. For example, the Monterey Bay National Marine Sanctuary is managed to balance commercial and recreational interests.

74. 16 U.S.C. § 1431(b)(1).
75. § 1433.
with conservation interests. Recently, the National Ocean Service has considered creating marine protected areas within the reserve which would exclude recreational fishing. This prospect has raised concern among fishermen who have fought such proposals on the political battlefield and often have been very effective. This tension highlights the conflict between preservation and exploitation.

Other federal, state, and local laws further complicate ocean management. The problems facing federal fisheries management are only part of a larger dilemma of how to integrate marine resource management in order to create the most effective and economically efficient system. The Pew Commission report recognizes the enormity of the problems, makes bold recommendations about the need for new attitudes and new laws, and ultimately calls for a major overhaul of the structure of ocean governance.

II. THE PEW REPORT

The Pew Oceans Commission was established in July 2000 by the Pew Charitable Trust—a non-governmental organization, established by Sun Oil founder Joseph N. Pew. The final Pew Oceans Commission report, America's Living Ocean: Charting a Course for Sea Change, was released in June 2003. It has been hailed by one environmental organization as being a “welcome focus on our beleaguered ocean and its resources,” while some in the fishing industry have criticized it as a “gloom and doom” picture painted in generalities. While the latter
statement may not be entirely inaccurate, the report has helped to bring much-needed attention to the multitude of problems facing our oceans.

The report provides both an extensive account of the problems facing U.S. oceans and detailed recommendations on how to address these problems. The report is divided into three main sections. "Part One: State of America's Oceans" provides an overview of the major anthropogenic problems. "Part Two: A Public Good at Risk" provides policy recommendations regarding governance, restoration, and preservation, and covers issues such as sustainable aquaculture, international management, science and education. "Part Three: Detailed Recommendations" elaborates further on governance, restoration and preservation. The Report identifies several major threats to the ocean: nonpoint source pollution, point source pollution, invasive species, aquaculture, coastal development, overfishing, habitat alteration, bycatch and climate change. The report also identifies problems with ocean governance: the focus on exploitation of resources with little regard for the environment, the fragmented nature of governance (institutionally, legislatively and geographically), and the focus on individual species instead of ecosystem management.

One can view the Pew Report recommendations as a tiered proposal encompassing broad concepts regarding a new ocean ethic, broad proposals for change in federal government and agency structure, and specific recommendations regarding particular problems. A major concept behind the Pew Commission recommendations is the need for a fundamental shift in management goals—from exploitation for economic gain to upholding the public trust through preservation and conservation. According to the Pew Commission report, this shift requires a new system of management at the national and regional levels. Also, the Pew Commission contends that the current laws and regulations governing the ocean need to be revised to reflect this new ethic and to shift the management structure to effectuate these goals.

[t]he pictures are nice, but this study contributes about as much to fisheries management as a coffee table book about coffee tables... Unfortunately, criticism always sells, regardless of fact. How would they justify the huge expense of time and money if the report supported the great progress we've made in fisheries management?

Pew is naturally calling for more of what sustains it and every other radical environmental entity: bigger government and more regulation. They use outdated regulations to file frivolous lawsuits, plunder taxpayer dollars from the U.S. Treasury, and pay the rent on their offices. See Recreational Fishing Alliance, Pombo Responds to Pew's "$5.5 Million Picture Book", June 15, 2003, available at http://www.billfishnetwork.com/article/A087RFAPew.asp.

85. Id. at 2-25.
86. Id. at 26-101.
87. Id. at 102-127.
88. Id. at 4-5, Box 1.
89. Id. at vii-viii.
The Pew Commission report identifies three major problems with ocean governance overall: (1) focus on exploitation instead of conservation, (2) fragmented governance, and (3) species instead of ecosystem management. All are problems found in marine fisheries management. This Comment will focus on the report’s key recommendations to change the philosophy behind ocean management, the structure of ocean management, and the regulation of fisheries.

A. The Pew Report Recommends New Values to Address Current Ocean Problems

The Pew Report recognizes that changes in laws and policies are not enough, but that fundamental changes in values need to occur. A list of "new ocean ethics" underlies the Commission’s recommendations. The new ethics include: "uphold the public trust," "practice sustainability," "apply precaution," "recognize interdependence," "ensure democracy," and "improve understanding." These ethics support the notions that marine resources are not limitless and that conservation should be a major focus of any agency whose activities affect these valuable resources. The new ocean ethics also recognize that marine resources are public resources and that actions regarding these resources should include the views of the entire public, not just commercial and recreational fishery interests. Finally, the ethics recognize the importance and need for improved scientific understanding of the complex interactions between human actions and their impact on the marine environment.

B. The Pew Report Recommends Reorganizing Federal Ocean Governance

In addition to the new code of ethics, the Pew Report lists five priority objectives to achieve the goals of obtaining and maintaining a healthy ocean ecosystem. The objectives pertaining to ocean governance as applied to fisheries are first to “[d]eclare a principled, unified national ocean policy based on protecting ecosystem health and requiring sustainable use of ocean resources.” Second, “comprehensive and coordinated governance” should be encouraged, and governance should

90. Id. at 10.
91. Id. at x. Other recommendations that will not be discussed include:
2. (b) Coastal development and pollution control is [sic] most appropriately addressed at watershed level.
4. Protect important habitat and manage coastal development to minimize habitat damage and water quality impairment.
5. Control sources of pollution, particularly nutrients that are harming marine ecosystems.
Id.
be created at the "scales appropriate to the problems." The regional scale is recommended for fisheries, presumably because of the regional nature of the problem—species and habitats vary by region as do the industries which use and exploit the resources. Third, fisheries management should be restructured and reoriented to focus on protection and sustainability, rather than economic efficiency.

To achieve these objectives, the Pew Commission makes five recommendations regarding ocean governance. First, the Pew Commission recommends that a National Ocean Policy Act (NOPA) be enacted, requiring all levels of government to "protect, maintain, and restore marine and coastal ecosystems." Second, the Commission recommends the establishment of Regional Ocean Ecosystem Councils as a part of NOPA, with the goal of developing and overseeing implementation of regional ocean governance. The regional ocean ecosystem councils should have a permanent advisory committee to obtain views from all interested parties. The regional ocean ecosystem councils would overlap in jurisdiction with the RFMCs but would have a much broader objective of addressing all issues impacting the ocean.

Third, the Pew Commission recommends that the regional ocean ecosystem councils establish a system of national marine reserves. These reserves would be in addition to those already established under the National Marine Reserves Program.

The fourth recommendation is to establish an Independent National Oceans Agency outside of the Commerce Department, which would be responsible for all ocean governance. The Commission recommends reorganization of current ocean agencies. The National Ocean Agency would include the current programs of the National Oceanic and Atmospheric Administration (NOAA) and programs outside NOAA, such as the Chesapeake Bay Program, the National Estuaries Program of the EPA, aquaculture programs, and shoreline protection and estuarine restoration activities of the Army Corps of Engineers.

Finally, the report recommends creating a permanent Interagency Oceans Council within the Executive Office of the President. The head

92. Id.
93. Id.
94. Id. at 33.
95. Id. at 33-34.
96. Id.
97. Id. at 103.
98. See infra at Part III, Evaluation of Recommendations.
99. AMERICA'S LIVING OCEANS, supra note 12, at 34.
100. Id.
101. Id.
102. Id.; see infra at Part III, Evaluation of Recommendations.
103. AMERICA'S LIVING OCEANS, supra note 12, at 34.
The duties of the council would include coordinating and overseeing implementation of NOPA, resolving interagency disputes regarding NOPA, and coordinating and certifying ocean budgets.105

C. The Pew Report Recommends Changing Fisheries Regulation

Along with a new system of ocean governance, the Commission recommends “Restoring America’s Fisheries” as one of the ways to obtain and maintain a healthy ocean ecosystem. Current problems with the fishing industry, as identified by the Commission include: overfishing, excess fleet capacity (a result of increased numbers and sizes of boats, in addition to technological advancement), fishing down the food web106 (initially depleting top carnivores such as tuna and sharks, then moving on to mid-trophic and finally low-trophic species), habitat degradation and alteration, and bycatch.107 To address these problems, the Pew Commission recommends changing the largely economic objectives of the Magnuson-Stevens Act. The Act’s new objective should be to “protect, maintain, and restore marine ecosystems” as a means of preserving healthy fisheries; to separate conservation from allocation decisions; to create fishery plans based on ecosystems rather than single species; regulate destructive fishing gear; to prevent fishing until a plan is in place that, in addition to current guidelines, also monitors bycatch and comprehensively addresses access and allocation; and to establish a fishery conservation and management trust fund.108

III. EVALUATION OF RECOMMENDATIONS

Many recommendations made by the Pew Commission appear to effectively address the rising concerns of sustainability and conservation—the need for managing the ocean as a public trust, and the importance of managing resources in an interconnected comprehensive way. Even so, the governance structure suggested by the Pew report begs the question of whether the recommended ocean governance system would fall short of the goal of achieving a legitimate, effective, and streamlined fisheries management system. The following section

104. Id.
105. Id.
106. “Fishing down the food web” is a phrase coined by the scientist Daniel Pauly in 1980. See Steve Pomplun, Eating Your Bait, Earthwatch Radio Script, (June 9, 2003), available at http://www.ewradio.org (wherein Daniel Pauly stated, “It’s a term I coined in 1980 in a paper that describes that globally, the fisheries are catching animals that are smaller and shorter lived.”). Dr. Pauly has written extensively on the subject of fisheries depletion. See, e.g., Daniel Pauly et al., Fishing Down Marine Food Webs, 279 SCIENCE 860 (1998).
107. AMERICA’S LIVING OCEANS, supra note 12, at 35-45.
108. Id. at 46-48.
discusses the Pew Report recommendations to adopt conservation objectives, to create an integrated federal management system, and to create regional ecosystem management. In this discussion, the differences and similarities between the Pew Report, the Stratton Report, and the U.S. Commission Preliminary Report are highlighted.

A. New Values: Shifting the Focus in Fisheries Management

There are striking differences between political perceptions of the ocean today, as expressed by the Pew Commission, and political perceptions of the ocean in the late 1960s, as exemplified by the Stratton Commission report. This shift in perception from immediate economic gain to a need for preservation and conservation reflects concerns about the current state of our ocean resources and the ability to preserve and protect marine resources for future generations.

1. Fishing Below the Maximum Sustainable Yield

The Pew Report stresses the need to fish well below the maximum sustainable yield (MSY), and the report points to several examples of fishery collapse due in part to fishing well above the MSY. The Stratton Commission expressed a much different view: "preservation of the stocks should not be the sole aim of fisheries management. Indeed, it is nearly impossible to adhere strictly to the maximum sustainable physical yield concept if two or more ecologically interdependent species are being exploited." This phrase is embedded in a discussion of the importance of economic objectives. In the Magnuson-Stevens Act, passed after the Stratton Commission report was published, the economic view was taken in defining Optimum Sustainable Yield for fisheries as, "the maximum sustainable yield from the fishery, as modified by any relevant economic, social, or ecological factor" (emphasis added). The use of the word "modified" allowed fishing in excess of the MSY for twenty years. In the 1996 amendments to the Magnuson Act, the word "modified" was changed to "reduced," in recognition of the inevitable collapse of a fishery due to fishing above the MSY, and reflecting the change in the perception of ocean resources.


110. AMERICA'S LIVING OCEANS, supra note 12, at 14, 35-36.

111. STRATTON COMMISSION, supra note 6, at 91.

112. Id. at 91-92.


2. **Ecosystem Management**

The Pew Commission report recommends ecosystem rather than species management of resources. The Stratton Commission also recommended, at least in the international arena, that fisheries management should be on the "basis of ecological units rather than species."\(^{115}\) The Stratton Commission noted the problems of species regulation—conventions do not cover entire ranges of species and modern equipment allows for increased "sophistication, range and flexibility."\(^{116}\) And the Stratton report stated that "[e]ven if effective, species regulation tends to shift fishing pressure to other species or to restrict development of underutilized fish in the same area."\(^{117}\) The Pew Commission addressed a similar concept, fishing down the food web.\(^{118}\) To accomplish ecosystem management, the Pew Commission recommends that fishery management plans take the ecosystem into account by addressing bycatch and habitat issues\(^ {119}\) and recommends the creation of regional ecosystem councils.

3. **Goal of Conservation, Not Economic Gain**

In addition to creating an overarching policy of marine protection, the Pew Commission recommends amending the Magnuson-Stevens Act to alter the main objective from maximum economic gain to long-term protection of the health and viability of fisheries.\(^ {120}\) If conservation objectives are to trump goals of immediate economic gain, amendments will need to have stronger language than the Sustainable Fisheries Act, which was an initial attempt to strengthen conservation goals in the Magnuson-Stevens Act.\(^ {121}\) The Sustainable Fisheries Act created new definitions to address conservation concerns, including "bycatch," "economic discards," "essential fish habitat," and "overfishing."\(^ {122}\) Also, the Sustainable Fisheries Act added National Standards Nine, which states that management measures shall minimize bycatch and minimize bycatch mortality "to the extent practicable."\(^ {123}\) NMFS points out that progress has been made since the enactment of the Sustainable Fisheries Act. For example, the New England sea scallop fishery and the Atlantic summer flounder fisheries are recovering and some New England
groundfish stocks are increasing. However, these success stories tell only part of the story. First, recovery efforts by NMFS often result from litigation by environmental groups to force compliance. Second, overfishing and depletion continue to threaten the long-term viability of many U.S. fish stocks. Despite some progress, the Magnuson-Stevens Act does not have strong enough language to mandate an effective (i.e., ecologically sound) system of management. The ten National Standards in the Magnuson-Stevens Act still largely focus on immediate economic gain over long term fishery health. Any proposed legislation must reframe the law’s purpose as seeking a better balance between resource extraction and conservation and provide more tools for enforcement.

B. Strengthening the System at the Federal Level

1. Creating an Independent Ocean Agency

The Pew Commission recommends creating an independent ocean agency that would encompass all ocean programs. While part of NOAA’s mandate is economic in nature, NOAA is the only Bureau in the Commerce Department whose mission includes environmental protection. NOAA’s placement in the Commerce Department has been criticized, because the Commerce Department is economically-based and appears, for the most part, to be disengaged in NOAA’s programs, except

124. NMFS, supra note 50, at 3-4.
125. See, e.g., Sarah Martineau, Lawsuit Targets Scallop Dredging, THE STANDARD TIMES, Jan 8, 2004, at A1 (discussing that NMFS had not done enough to improve ocean habitats and that RFMCs had four years to improve their management plans based on a 1999 lawsuit (American Oceans Campaign v. Daley, 183 F.Supp.2d 1 (D.D.C. 2000)); see also, NRDC v. Daley, 209 F.3d 747, 755-56 (finding that the quota for summer flounder catch “completely diverges from any realistic meaning of the Fishery Act” and remanding the case back to the agency for proceedings compliant with the opinion).
128. AMERICA’S LIVING OCEANS, supra note 12, at 34.
129. See DOC website, stating: NOAA’s overall mission is two-fold: (1) environmental assessment and prediction – to observe and assess the state of our environment, while protecting public safety and the Nation’s economic and environmental security through accurate forecasting; and (2) environmental stewardship – protect ocean, coastal and living marine resources while assisting their economic development.
when NOAA's policy is in conflict with the Department's economic or political interests.\textsuperscript{130}

While the U.S. Commission does not advocate the creation of an "independent NOAA," it has put forth a similar proposal for reorganizing the ocean management system by an extended three step process: first, strengthening NOAA; second, consolidating ocean and coastal programs to one agency; and third, eventually consolidating all natural resource functions.\textsuperscript{131} Under step three, the U.S. Commission states that the goal could be accomplished through the creation of a new Department of Natural Resources.\textsuperscript{132}

Creating a new independent ocean agency may be an unattainable goal due to lack of political will.\textsuperscript{133} The Stratton Commission recommended establishing "a major civilian agency" (i.e., NOAA) as an independent agency and recommended transferring existing agencies and programs to NOAA.\textsuperscript{134} For political reasons NOAA was instead placed in the Department of Commerce.\textsuperscript{135} Since 1978 there have been twelve unsuccessful federal proposals to create an independent NOAA or to transfer NOAA to a new department.\textsuperscript{136} Instead of pushing for an independent agency, it is more realistic to transfer those ocean programs currently outside of NOAA to NOAA and give NOAA the task of administering and implementing NOPA and all other ocean programs. Such a move should have a similar effect as creating a new agency. The question would remain as to whether the goals of preservation and conservation could trump economic considerations, while NOAA remains under the umbrella of the Commerce Department.

\textsuperscript{130} Roger E. McManus, The Stratton Commission and Future Development of U.S. Management Policy for Its EEZ, in STRATTON ROUNDTABLE, supra note 6, at 41, 45. See also Allison, supra note 33, at 28-29 (recommending creation of an independent agency).

\textsuperscript{131} U.S. COMMISSION PRELIMINARY REPORT, supra note 10, at 73-78.

\textsuperscript{132} Id. at 78.


\textsuperscript{134} STRATTON COMMISSION, supra note 6, at 277.

\textsuperscript{135} Prior to NOAA, marine programs were largely a part of the Department of the Interior. Nixon's placement of NOAA in the Department of Commerce has been attributed to his anger at then Secretary of Interior Walter Hickel, for his opposition of the Vietnam War. See Elliot Norse, Testimony before the Commission on Ocean Policy Concerning Habitat and Ocean Resources, April 19, 2002, available at http://oceancommission.gov/meetings/apr18_19_02/norse_statement.pdf. See also U.S. COMMISSION PRELIMINARY REPORT, supra note 10, at 71-72.

\textsuperscript{136} U.S. COMMISSION PRELIMINARY REPORT, supra note 10, at 72 Fig 7.1, 79-81 (listing the proposals).
2. Creating an Interagency Council

The Pew Commission recommends creating a permanent interagency ocean council within the Executive Office of the President. The council would coordinate interagency ocean issues and advise the President. The council membership would comprise heads of agencies for those agencies that have a role in ocean management. The U.S. Commission also recommends an interagency council (National Ocean Council) comprised of similar members who would serve a function comparable to that recommended by the Pew Commission. An analogous council, the Marine Sciences Council, was created in 1966, but was disbanded with the establishment of NOAA. Also, the Stratton Commission recommended that a committee be formed that would be "broadly representative of the Nation's marine and atmospheric interests," to serve in an advisory capacity. In response to this recommendation, Congress created the National Advisory Committee on Oceans and Atmosphere. However, the current U.S. Commission notes that this committee was disbanded for lack of political support in the late 1980s.

Even in the absence of a new independent ocean agency, the creation of an interagency ocean council may provide some of the coordinating power necessary to create cohesive ocean management at the federal level. However, some mechanism needs to be established to ensure that lack of political support will not undermine a new interagency council.

C. Fisheries Management and the Fate of the RFMCs

The Pew Commission and several scholars have noted the myriad problems with the RFMC system. It is this author's view that RFMCs should either be eliminated and replaced by a new system of governance,

---

137. AMERICA'S LIVING OCEANS, supra note 12, at 34.
138. Id. at 107.
139. Id. at 107-08.
141. McManus, supra note 130, at 42-43.
142. STRATTON COMMISSION, supra note 6, at 245.
143. See U.S. COMMISSION PRELIMINARY REPORT, supra note 10, at 50.
144. Id.
145. AMERICA'S LIVING OCEANS, supra note 12, at 44 (stating that the management system suffers from "regulatory capture").
146. See, e.g., EAGLE ET AL., supra note 42, at 44 (recommending taking steps necessary to reduce conflict of interest, creating more diverse councils, and increasing oversight of council decisions); Thomas A. Okey, Membership of the Eight Regional Fishery Management Councils in the United States: Are Special Interests Over-Represented?, 27 MARINE POL'Y 193, 203 (2003) (finding that "[t]he dominant representation of special interests and self-interests on [RFMCs] ... is likely to be the fundamental cause of failure of modern fisheries management.").
or the membership should be restructured in such a way as to reflect their role as managers of a public trust. In other words, the RFMC members should reflect diverse viewpoints, not just those interests expressed by economic stakeholders. And yet, the Pew Commission recommendations maintain the RFMC system structure and leave the composition of the membership intact. Why? A careful review of the report’s ocean governance recommendations in combination with its specific fisheries recommendations, reveals a new system that would strip much of the authority away from the RFMCs. In the end, RFMCs would remain in charge of allocating the fishery resources (i.e., determining which fishing parties or interests have access to the resources), while the determination of where fishermen can fish and how many fish can be caught would be placed in the hands of regional ocean ecosystem councils and scientific bodies, respectively.

1. Reducing the Role of the RFMCs by Creating Regional Ecosystem Councils

The Pew Commission’s proposed system of ocean governance would not eliminate the RFMCs. However, under the new governance system RFMCs’ role would be substantially reduced. The creation of ecosystem councils is one mechanism that would effectively remove power from the RFMCs. Although the Pew Commission recommendations state that the ecosystem councils would play an advisory role, leaving the “day-to-day management to the appropriate agencies,” the recommendations also include language that indicates a stronger authority. The ecosystem councils would be in charge of “developing and overseeing implementation of enforceable ocean governance plans.” The plans would evaluate the marine ecosystems, identify key threats, enable the monitoring of ecosystem health and “establish clear and measurable management and restoration goals.”

147. See infra Part IV, Section B.
148. AMERICA’S LIVING OCEANS, supra note 12, at 104
149. This authority is in contrast to the U.S. Commission recommendations for ecosystem councils. Under the U.S. Commission recommendations, the ecosystem councils themselves would be voluntary – based on regional decisions – and would have only an advisory role in developing marine and coastal management. U.S. COMMISSION PRELIMINARY REPORT, supra note 10, at 57-62.
150. AMERICA’S LIVING OCEANS, supra note 12, at 33 (emphasis added).
151. Id. at 104.
152. Id.
place, etc. An ecosystem governance plan that addresses habitat and living resources by zoning the ocean would effectively be a plan that regulates where fishermen could fish, leaving the RFMCs to regulate fishing in the areas designated by the regional ecosystem councils. The inclusion of another regional council that takes the ecosystem into consideration could both increase accountability and curb the environmental impacts of self-interested RFMCs voting members.153

Regional ecosystem councils may be necessary to improve management and address increasing problems of marine resources exploitation and habitat destruction and allow for the development of ecosystem management rather than maintaining the current system of fragmented management. However, ocean ecosystem councils and the RFMCs appear to have duplicative roles. Under the Pew report's recommendations, the RFMCs would still be required to create fishery plans that consider habitat. In fact, basing fishery management plans on ecosystem considerations elevates the RFMCs' task of evaluating habitat.154 At the same time, ocean ecosystem councils would be involved in ocean zoning based on habitat and living resources. These overlapping functions create the potential for the conflicting mandates and confusing regulations, similar to those that already exist between the National Marine Sanctuaries Act and the Magnuson-Stevens Act.155 Temporally separating the planning processes could address this problem. For example, fishery management plans would be drawn up after and in response to regional ecosystem plans. However, this schedule might further burden an already slow planning process. Under such a management scheme, measures that allow for rapid response in emergency situations would be necessary.

It is doubtful that fishermen and other stakeholders will view as fair and transparent a system that shifts control of decisions about where fishermen can fish to a management regime outside of the RFMCs.156 In order to create a more transparent, fair, and effective system, not only should new legislation address current management problems, but it should also avoid creating overlapping management regimes.

2. Reducing the Role of RFMCs by Separating Conservation and Allocation Decisions

Currently, the RFMCs decide both how many fish can be caught (conservation decisions) and who has the right to catch them (allocation decisions). Placing these decisions under one authority has been criticized

153. See discussion, supra Part I, Section B(2).
154. AMERICA’S LIVING OCEANS, supra note 12, at 111.
155. See infra Part I, Section B.
156. See infra, at Part III, Section D.
for allowing the RFMCs to increase fishing quotas above scientifically recommended amounts in response to pressure from industry rather than taking the more politically difficult route of restricting allocation to the scientifically recommended total allowable catch. The Pew Commission recommends separating total allowable catch (conservation) decisions from catch allocation decisions by giving conservation decisions to fishery scientists and leaving the allocation decisions in the hands of the RFMCs. The U.S. Commission also recommends separating conservation and allocation decisions. This issue is at the center of a heated debate over how to effectively manage marine fisheries.

One criticism of such a plan is that, because scientific uncertainty creates a range of possible MSY levels, allowing fishery scientists to determine catch will only shift the decision-making problem from the RFMC to the scientific body. It is possible, however, that scientists will feel less pressure to make decisions based on constituents' interests than the stakeholders that make up the councils. Requiring peer review of decisions and corroboration by outside sources, as recommended by the U.S. Commission, may remove the effects of pressure by constituents.

3. No Change in the Membership of RFMCs

The Pew Reports makes bold recommendations that, if implemented, would result in a new system of ocean governance that focuses on conservation and preservation above economic considerations. Lack of the obvious recommendation to change the membership composition of the RFMCs leaves one wondering if the Pew Commission took too much consideration of RFMCs concerns when making recommendations.

The Pew Commission advises that membership of ocean ecosystem councils is to consist of federal and state representatives, allowing stakeholders only an advisory role, but there is no similar recommendation to change the membership of the RFMCs. If such a

160. Much debate at the recent NOAA Fisheries meeting, "Managing Our Nation's Fisheries: Past, Present and Future" (Nov. 13-15, 2003) centered on the discussion of whether or not to separate allocation and conservation (or allocation and scientific) decisions. See America's Living Oceans, supra note 12, at 109-10 (recommending separation of allocation and conservation decisions).
163. America's Living Oceans, supra note 12, at 103.
composition is desirable for ecosystem councils, it raises the question of why such a system was not recommended for RFMCs.\textsuperscript{164} Many, including the U.S. Commission, have recommended changing the membership of RFMCs as a way of ensuring a democratic process that reflects the views of the entire public and not just stakeholders.\textsuperscript{165} In describing the nature of the fisheries management problem, the Pew Commission report states that "the management structure and process suffer from regulatory capture, a state of affairs in which government regulators (in this case, fisheries managers) have come to believe that their role is to defend the interests of the regulated community rather than promote the public interest."\textsuperscript{166} However, the Pew Commission plan fails to address this issue in regard to allocation of resources. It is true that RFMCs would have a reduced role under the Pew Commission plan. Still, the RFMCs would have an enormous responsibility in ensuring fair resource distribution. Removing conservation decisions from the RFMCs could prevent self-interested parties from increasing the total allowable catch beyond what is scientifically recommended, but the possibility of self-interested allocation decisions would persist.

4. \textit{The Role of Fishermen in Fisheries Management}

While self-regulation of the kind currently associated with the RFMCs is arguably ineffective, fishermen need to be included in management decisions. The prevailing, or at least outspoken, view in the fishing community is that the problems with fisheries today are due to a history of poor and ineffective management, which has resulted in job loss within the fishing community.\textsuperscript{167} Some members of the fishing community also believe that scientists lack the requisite knowledge to determine the status of fish stocks and that they promote personal agendas.\textsuperscript{168}

Cooperation among fishermen and scientists is necessary because regulation of commercial and recreational fishing industries is based largely on the honor system. In order to collect the data needed to evaluate the health and status of fisheries, fishery scientists require

\textsuperscript{164} Also of interest is the fact that the U.S. is the only nation that allows stakeholders to participate in the fishery management decisions on more than advisory basis. EAGLE ET AL., supra note 42, at 11, Box 2.

\textsuperscript{165} See id.; U.S. COMMISSION PRELIMINARY REPORT, supra note 10, at 231.

\textsuperscript{166} AMERICA'S LIVING OCEANS, supra note 12, at 44.


\textsuperscript{168} Id.
support and compliance from fishermen.\textsuperscript{169} For example, scientists gather information regarding the catch in each of several locations. These catch data are typically collected and submitted by fishermen. The number of observers (individuals hired to ensure compliance) aboard vessels to monitor activity is generally insufficient, and measurement of fishing pressure from port is difficult. An alternative to observers is the use of a vessel monitoring system, which tracks the location of a vessel via satellite. It is helpful in ensuring compliance when certain areas are closed to fisheries. However, it does not provide data about what kind and how many fish are being caught. Unilaterally stripping the RFMCs of their authority to decide maximum fish count without making efforts to bring scientists and fishermen closer together, as recommended by the Pew Commission, may lead to greater skepticism, and therefore less compliance on the part of fishermen.

One answer is clear: there must be less fishing. That leaves the question of what should be done about out-of-work fishermen and decommissioned boats. This can be coupled with two additional problems: (1) lack of funding and resources for scientists to determine the health of fishery stocks\textsuperscript{170} and (2) a distrust of scientists by fishermen (partially due to a belief that scientists are not well-informed about the stocks).\textsuperscript{171} These problems combined with fact that fishermen have valuable knowledge about the fisheries\textsuperscript{172} suggest there may be cooperative solution: use the decommissioned boats to do fish surveys with former commercial fishermen on board to assist in data collection along with fisheries scientists to ensure the proper scientific method is in place. In fact, the U.S. Commission has made this same recommendation for cooperative research in their report.\textsuperscript{173} This is not a new concept—today out of work fishermen in Newfoundland are cooperating with fishery scientists to evaluate the condition of the Canadian cod population.\textsuperscript{174}

\textsuperscript{169} Id. Some data, however, is collected independent of fishermen.
\textsuperscript{170} McManus, supra note 130, at 45.
\textsuperscript{171} See Cook & Daley, Mistrust between Scientists, Fishermen Mars Key Mission, supra note 170.
\textsuperscript{172} See, e.g., Ilene M. Kaplan & Bonnie J. McCay, Cooperative Research, Co-Management and the Social Dimension of Fisheries Science and Management, 28 MARINE POL'Y 257, 258 (2004); Astrid Scholz et al., Participatory Socioeconomic Analysis: Drawing on Fishermen's Knowledge for Marine Protected Area Planning in California, 28 MARINE POL'Y 335 (2004); Robert E. Johannes et al., Ignore Fishers' Knowledge and Miss the Boat, 1 FISH & FISHERIES 257 (2000).
\textsuperscript{173} U.S. COMMISSION PRELIMINARY REPORT, supra note 10, at 226.
\textsuperscript{174} See Mark Kurlansky, Cod: A Biography of the Fish that Changed the World 1-14 (1997).
CONCLUSION

Since the creation of the Stratton Commission in the 1960s and the ocean management system implemented in the 1970s, multiple factors have contributed to overfishing, habitat degradation and increasing concern about the health and future of our oceans and their resources. These factors include increased fishing pressure, excess fleet capacity, advances in technology, pollution, development, and arguably the current fishery management structure. The Pew Commission report is the first since the Stratton Commission to identify major problems facing the oceans and to offer new solutions. The Pew Commission recommends the creation of a new ocean agency that would house all current ocean agencies and activities, thereby expanding the role of the federal government in regulating ocean resources. In addition to the current programs, the new ocean agency would include regional ocean ecosystem councils, established to coordinate and oversee activities on a regional level. The Pew Commission plan removes power from the REMCs by granting the regional ocean ecosystem councils the power to zone the ocean and by separating conservation decisions by scientists from allocation decisions by the RFMCs.

The Pew Commission report has generated both positive and negative press, and it is unlikely that the report will go unnoticed by those elected officials responsible for making the needed changes to secure a future of sustainable seas. It is doubtful that officials will heed all of the recommendations in the Pew Commission report. However, the report is a positive step toward finding solutions to the devastation of the marine environment. The Pew Commission report should be considered when amending current laws affecting the ocean and should be used in conjunction with the U.S. Oceans Commission report when reformulating how our nation’s oceans should be managed to ensure bountiful ocean resources for future generations.

175. Excluding the U.S. Coast Guard.