

Testimony of Penelope D. Dalton

before the

**Subcommittee on Oceans, Atmosphere and Fisheries
Committee on Commerce, Science, and Transportation
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Good morning, Mr. Chairman, and members of the Committee. Thank you for the opportunity to be here today. I am Penny Dalton, Vice President and Technical Director of the Consortium for Oceanographic Research and Education (CORE), an organization that represents 66 of the nation's leading academic institutions in the ocean sciences. While my testimony includes CORE views on fishery-related research and education issues, its primary focus will be on my experience as former director of the National Marine Fisheries Service (NMFS).

My tenure with NMFS was relatively brief - just 21 months - but what it lacked in length was more than made up by the intensity of the experience. When I came to NMFS, my goal was to initiate some needed changes. For years, NMFS has been an agency of concern for fishermen, environmentalists, state officials, and the Congress. Through incremental changes in the responsiveness and transparency of the agency decision-making process, I hoped to begin to address those concerns.

Unfortunately, my existence was taken over by regulatory processes, litigation, negotiations, Secretarial briefings, Congressional testimony, public meetings, budget problems, and reporting deadlines. I found that the pace and immediate requirements of day-to-day operations drove the organization, subsuming efforts to develop or pursue long-term goals. Life at NMFS was a little like being on the F/V Andrea Gail in the Perfect Storm; you constantly felt that the next wave might well be the one that would capsize the boat.

There also were enormously positive aspects. For the most part, the NMFS staff must number among the most dedicated in the federal government, working long hours to meet impossible deadlines in the face of almost constant controversy. While the agency frequently was the subject of criticism, the comments usually were well-intentioned and came from stakeholders – fishermen, anglers, environmentalists, and the Congress - who genuinely wanted NMFS to succeed. Over the years, this support has been essential for maintaining the integrity and morale of the agency and I want to take this opportunity to thank those of you here who have been part of that effort.

NMFS Management and Budget Challenges

How did we get to where we were in March 2000? To answer that question, Deputy Under Secretary Scott Gudes and I commissioned an independent review of the NMFS budget and management processes. We were delighted when Ray Kammer, head of the National Institute of Standards and Technology and the former NOAA Deputy Under Secretary, agreed to head the review team. He delivered his initial report in June 2000. In addition, other groups, including the H. John Heinz III Center for Science, Economics and the Environment (Heinz Center) and the National Research Council (NRC) examined different aspects of the agency's mission and operations. Collectively, these reports point out a number of challenges that must be addressed by NMFS if it is to move beyond its current problems.

Regulations and litigation. In 2000, NMFS regulatory activities ranked fourth among federal agencies based on the number of publications in the *Federal Register*. The top three were the Environmental Protection Agency, the Federal Aviation Administration and the Federal Communications Commission. While the Federal Communications Commission budget is relatively modest, the other two agencies have budgets and personnel numbers that far exceed those of NMFS.

Accompanying this intense regulatory activity has been a surge in litigation. Beginning in 1996, legal challenges have risen from an average of 1 or 2 each year to a current high of 26 in 2001. While much of the rise has been blamed on enactment of the Sustainable Fisheries Act, a larger proportion of the new cases have been challenges under the National Environmental Policy Act, the Endangered Species Act and the Regulatory Flexibility Act. For example, a major contributor to the agency's caseload came about when the Regulatory Flexibility Act became subject to judicial review in 1996.

More troubling than the cases themselves has been the decline in the ability of NMFS to prevail when agency decisions are challenged. Before 1994, the government lost very few cases. In recent years, however, this record has been reversed and in the last four years the agency has lost more cases than it has won. This gives rise to expectations of success by other potential litigants, and issues that might have been resolved by the give and take of the regulatory process are remanded for consideration by the courts.

The rise in legal activity has had both positive and negative effects on NMFS. On one hand, it has served to point out programmatic areas where additional resources are necessary, such as the need to improve the collection and analysis of social and economic information relating to the marine activities NMFS regulates. Litigation also has led to greater awareness of and investment in strengthening agency compliance with procedural statutes such as the National Environmental Policy Act. On the other hand, the litigation itself creates demands on personnel to meet court requirements and deadlines. This may cause the agency to fall further behind in the regulatory process in other areas, since the people responding to the court requests are also integral to the regulatory process. In addition to the increased workload, a negative court

decision often has a serious adverse impact on morale and contributes to staff “burnout” that can negatively affect agency capabilities to respond in subsequent cases.

Budget constraints. While NMFS has received substantial funding increases over the past decade, severe fiscal constraints persist in some regions. The Kammer report highlighted a number of contributing problems in the NMFS budget structure, including: (1) failure to fund full costs for non-discretionary increases like pay raises; (2) dedication of budget increases to new initiatives and stagnant funding for base program activities; (3) lack of base budget analyses; and (4) delays in allocation of appropriations and limited flexibility due to proliferation of budget accounts. In the time period since the Kammer report was completed, Congress and the Administration have worked together to address overall budget shortfalls, substantially increasing the funding available to the agency. In addition, Dr. Hogarth is continuing efforts to develop procedures for base budget analysis and to improve the allocation process. The biggest remaining short-term challenge in this area may be to reach agreement on a budget structure or process that provides the agency with adequate flexibility to meet unanticipated needs but still ensure that Administration and Congressional priorities are met.

Interacting missions and legal mandates. NMFS is the federal agency with primary responsibility for stewardship of this nation’s living marine resources. However, that mission and legislative authority interact with those of other federal and state agencies and international organizations, and the boundaries among these entities are often far from clear. The Department of the Interior, the Environmental Protection Agency, the Army Corps of Engineers, and international fishery commissions all have statutory mandates for programs that directly affect living marine resources. Even within NOAA, the National Ocean Service has responsibility for coastal zone management and marine sanctuaries and the National Sea Grant College Program carries out important research, outreach and education activities. Nor are the relative roles well-defined in the fishery management process among NMFS, the regional fishery management councils, the interstate marine fisheries commissions and the states. As a result, far too much time is spent in debating who is in charge and in competing for fiscal resources.

Another obstacle to effective marine resource management is that, while a number of entities may be affected by or have defined roles in the decision-making process, legal accountability is construed narrowly. The result is that participants such as the regional fishery management councils are important in formulating fishery regulations but are not formal participants in a legal challenge, even if they are willing to be. Similarly, the councils have no legislatively defined role in development of a biological opinion under the Endangered Species Act for fisheries that affect a listed species. This situation contributed substantially to initial problems in the biological opinion for the North Pacific groundfish fishery. It was effectively addressed through administrative action to include the North Pacific Council as a full partner in the process. A related issue is the application of our marine resource statutes to U.S. participants in international fisheries, particularly where there is a U.S. mandate to take conservation action, but little international consensus on the need. Consequently, our fishermen may be restricted in their activities while foreign fishermen operating in the same international waters continue to fish

with the potential to undermine U.S. conservation efforts.

These and similar examples illustrate the need for flexibility and cooperation in the dealing with interacting missions and laws. In the areas where NMFS has been able to work through an interjurisdictional process, the agency has achieved some notable successes, like the recovery of Atlantic striped bass populations and steady increases in the number of endangered Kemp's Ridley sea turtle nests.

Workforce trends. Over the next decade, one serious concern for NMFS will be the “graying” of its workforce. In July 2000, the Ocean Studies Board of the NRC conducted a workshop on recruiting fishery scientists. The report of that workshop states that, “Similar to other federal agencies, NMFS anticipates regular retirement of 30% of its scientists within the next 5 years; an additional increment of as much as 20% will leave because of early retirement incentives.” That translates into a potential loss of up to half of the agency’s scientific workforce within a relatively short period of time.

In addition to replacing retired scientists, NMFS also must respond to changes in the skills and expertise needed by existing and potential personnel. The agency already is working with Sea Grant to increase the number of economists, social scientists, and stock assessment experts on staff. Transition to ecosystem-based management will require development of indicators of ecosystem conditions and more attention to ocean observing systems that monitor changes in those indicators. Training in public outreach, adaptive management and ecosystem function also are likely to be priorities. Finally the agency must continue to seek greater diversity in its workforce.

Scientific basis for marine resource management. CORE institutions stand ready to assist NMFS in both education and research efforts. The CORE institutions represent the best marine research capability in the world. Almost all are engaged in scientific investigations relevant to fishery resource management to varying degrees and many work with NMFS to provide information and analyses for management.

Much of the research and monitoring work of NMFS is focused on stock assessments that answer the narrow question of “how many fish are there?” These stock assessments have historically been the centerpiece of the NMFS scientific effort and are essential for making management decisions on individual species. In times of limited budgets, NMFS has devoted the majority of its research resources to this very important, but necessarily limited endeavor.

While this research is methodologically sound, it generally receives very limited peer review in the conventional sense. Typically the need for the data is immediate and management decisions benefit from its rapid availability. The data may be examined by regional scientific and statistical committees or receive an internal review, a practice which does not meet traditional academic standards. Such limited review can undermine the credibility of the NMFS scientific effort. Nonetheless, these long-term records have been invaluable for the re-analysis of changes that

occurred at the ecosystem level. Making this information more widely available to academic researchers and others could add an important dimension to the overall scientific effort.

There is no question but that accurate, timely and comprehensive stock assessments are essential for making good management decisions. Narrowing the margin of error is in the best interest of all stakeholders and controversial decisions based on sound science are more likely to be met with agreement than those arrived at by other means. In 1998, the NRC noted that “the quality of data used in five stock assessment models was more important than the particular model used.” One major contribution to improving resource information will be the construction of a new series of modern fishery survey vessels, the second of which is proposed in the fiscal year 2003 budget currently pending before the Congress. CORE institutions recognize and support the strong leadership provided by the Commerce Committee and its members on this issue, as well as on the need for renewal of the academic research fleet.

In addition to the new fishery vessels, CORE believes that NMFS’s scientific credibility could be enhanced if it supported a robust program of external independent research that would serve as a validation of the rapid, task-oriented, narrowly focused surveys conducted by the agency today. In 2000, CORE held a workshop examining the role of scientific information in fisheries management. In addition to recommending that scientific information pass independent scientific review, the panel recommended that collaborative data collection and research efforts be encouraged among agency scientists, independent scientists and representatives of industry and public interest groups. Increased investment in such partnerships should increase the reliability and quality of the NMFS scientific effort.

In addition and as mentioned earlier, NMFS typically has focused its scientific effort on science that is very close to the decision at hand; be it counting fish or understanding the life cycle of salmon, the avenue of investigation has been relatively narrow. We now realize the limitations of such an approach and today NMFS is beginning to consider managing fisheries as comprehensive ecosystems. In their 2000 report on marine fisheries data, the NRC recommended that NMFS needed to “[improve its] understanding of the functioning of the marine ecosystems affected by fishing activities by studying important non-target species to determine their feeding habits, their distribution, and their prey and predators.” This inclusive approach to fisheries management is one that CORE supports.

With the backing of NMFS and non-governmental foundations and under the guidance of a group of ten senior marine scientists from around the world, CORE currently manages a comprehensive research program called the Census of Marine Life. The goal of the Census is to expand our understanding of the quantity and distribution of life in our world’s oceans so that changes can be monitored and understood. Its unique niche among global marine research programs comes from its focus on diversity through the higher levels of food webs, the discovery and classification of newly discovered species, and its examination of timelines extending back beyond the limits of modern ocean science.

The benefits of this line of study in such areas as climate change and commercial fishery management have become clear. Ecosystem management requires the development of new technologies as well as knowledge and understanding of poorly studied non-commercial and rare species that are the focus of the Census. Earlier this week, the Washington Post ran a major story on how jellyfish “blooms” affect other marine life. One reason that single-species management of fisheries around the world has failed to provide sustainability is that competition from poorly studied species, such as jellyfish, can displace more valuable fish species. Part of the Census is a rapidly growing ocean biogeographic information system to house comprehensive biological records and to make them available online. The transition to ecosystem management will require imaginative and broadly based analysis of the best available records, including those from NMFS.

Without broader knowledge developed from a robust research and cataloging effort, such as that being undertaken by the Census, ecosystem management of fisheries will be difficult, if not impossible. Thus, it is important for NMFS to invest in a strong program of independent basic research to support the task of implementing a comprehensive ecosystem management strategy.

Conclusion

The Heinz Center book, Fishing Grounds, stresses the importance to NMFS of evaluating the impacts and effectiveness of its management decisions. It states that, “Management decisions tend to be reactive, rather than strategic actions based on long-term goals and objectives. For this reason, the resolution of one problem often leads to the generation of another, and decisionmakers continue to jump from one crisis to the next.”

As Bill Hogarth and Ray Kammer have indicated in their testimony, NMFS has taken steps and will soon receive a number of recommendations for addressing the challenges outlined above. However, many of these steps are short-term solutions that are not likely to move the agency out of its current reactive management approach.

What is needed is an opportunity for the agency to work with its constituent groups to define long-term priorities and a strategy for a coordinated program to improve our understanding and sustainable use of living marine resources and to make the transition to ecosystem management. Once those priorities are established, it will be necessary to evaluate our current laws and practices and make necessary changes. The program must address such still unresolved issues as overcapacity and access in fisheries, user fees, agency and organizational roles, and the transition to ecosystem management. It would be intellectually challenging to develop and politically difficult to implement, but offers real promise for breaking out of the cycle of crisis management. As part of the evaluation, consideration should be given to the development of new legislation that would incorporate existing single focus laws into a single, ecosystem-based marine resource management statute.

Today, a new Commission on Ocean Policy has been established and is considering the

elements of a comprehensive national policy that will guide marine resource decisions in the decades to come. The foundations of our current marine resource policies can be traced back to 1969 and the recommendations of the first ocean commission named for its chairman, Julius Stratton. The Watkins Commission should be the audience for the outcome of the priority-setting process outlined above. The difficulty of such an effort may seem overwhelming when one considers the breadth and complexity of the issues facing NMFS and the Commission. Nevertheless, with support from this Committee, I am confident that it is a goal that can be reached. Thank you.