

**WRITTEN TESTIMONY OF  
DR. SAMUEL POOLEY  
PACIFIC ISLANDS FISHERIES SCIENCE CENTER DIRECTOR  
FOR THE NATIONAL MARINE FISHERIES SERVICE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
U.S. DEPARTMENT OF COMMERCE**

**HEARING ON  
MAGNUSON-STEVENSON ACT REAUTHORIZATION**

**BEFORE THE  
COMMITTEE ON NATURAL RESOURCES  
UNITED STATES HOUSE OF REPRESENTATIVES**

**FEBRUARY 28, 2014**

**Introduction**

Good morning, Mr. Chairman and Members of the Committee. Thank you for the opportunity to testify before you today. I am Samuel Pooley, the Pacific Islands Fisheries Science Center Director for the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS). NMFS is dedicated to the stewardship of living marine resources through science-based conservation and management. Much of this work occurs under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), which sets forth standards for conservation, management, and sustainable use of our Nation's fisheries resources.

NMFS is an acknowledged international leader in fishery science, rebuilding overfished stocks, and preventing overfishing. Today, we know more about our fish stocks than ever before, although there is much yet to accomplish in our region. Nationally and locally, it is vital that our science not regress, as this would inevitably lead to declines in our stocks and a loss in the economic and social values they provide. Our progress in making fisheries management more effective is based on the principle that management is based on sound science. National Standard 2 of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) mandates that all fisheries conservation and management measures must be based upon "the best scientific information available" (16 U.S.C. 1851(a)(2)). While we face challenges to securing accurate, precise, and timely data for stock assessments, on balance, our science-based management has consistently proven to provide better resource management than without this advice. This has, in turn, led to improved productivity and sustainability of fisheries and fishery-dependent businesses and communities.

NMFS continues to make substantial progress toward improving the quality of the science available to effectively manage commercial and recreational fisheries, benefiting coastal communities and the United States (U.S.) economy both today and for generations to come. We greatly appreciate the increased funding that Congress has provided to make U.S. fishery management, and its preeminence worldwide, possible.

My testimony today will focus on how fisheries science in the Pacific Islands is conducted and how this science underpins and provides for good management. We represent a diverse region with locally and internationally important fisheries, fisheries that are important both commercially and recreationally but also culturally. We provide scientific information for fishery management decision-making to the Western Pacific Fishery Management Council through its Scientific and Statistical Committee and to the Western and Central Pacific Fisheries Commission through its Scientific Committee and the independent International Scientific Committee on Tuna and Tuna-like Species (ISC) in the North Pacific.

### **Fisheries Science in the Pacific Islands**

Without high-quality fishery science, we cannot be confident the Nation is attaining optimum yield from its fisheries, or that we're preventing overfishing and harm to ecosystems and fishing communities. Attaining optimum yield requires investing in information about fish stocks, marine habitats, and ecosystems and the people, industries, and communities that rely upon fishing. To achieve the goals of the Magnuson-Stevens Act, we must conduct the research and analyses necessary to understand the underlying life histories and population dynamics of our fisheries as well as the environmental and habitat factors affecting the sustainability of fish populations. We must continue to increase what we know about our fish stocks in order to reduce uncertainty in our estimates of fishery population status and to avoid reduced annual catch limits, resulting in lost economic and community opportunities.

The importance of increasing the frequency of stock assessments, improving the quality of fisheries science with a better understanding of ecosystem factors, and enhancing our engagement with fishermen cannot be stressed enough. Collecting adequate data in our region, including the State of Hawaii, the Territories of American Samoa and Guam, and the Commonwealth of the Northern Mariana Islands as well as the high-seas fisheries, presents unique challenges and requires additional investments in personnel and resources to be successful. These historically have relied on fishery dependent data rather than the NOAA and cooperative research surveys that typify fisheries research in the continental United States.

To address these challenges, NMFS announced on June 22, 2013, a Territorial Fisheries Science Initiative. This initiative involves the Pacific Islands and Southeast fisheries science centers to specifically expand fisheries science capacity, including fisheries information, from the Territories of American Samoa and Guam, and the Commonwealth of the Northern Mariana Islands, as well as the Territories of the U.S. Virgin Islands and the Commonwealth of Puerto Rico. The Territorial Fisheries Science Initiative is an effort to overcome the lack of data collection capacity in the U.S. territories that has resulted in a paucity of scientific information to guide management actions. The small size of the territory governments with their modest budgets; the relatively low commercial value of diverse and small-scale fisheries; and the limited NMFS presence in the territories have all contributed to the current shortcomings. This initiative is intended to address this situation, increase our engagement with territorial government agencies and academic institutions, improve the quality and reliability of Pacific Islands fishery stock assessments, and increase stakeholder and community participation in and understanding of our scientific work.

Funds from this Territorial Fisheries Science Initiative will be spent in the territories to support locally-based science, build scientific and monitoring capabilities, and enhance capacity and relationships with each of these U.S. territories. This initiative will include grants to and contracts with the territorial fisheries agencies as well as to local academic institutions and cooperative research partners to help build

local scientific capacity. In FY13 under this Territorial Fisheries Science Initiative, \$125,000 was issued to each of the Pacific Islands and Southeast fisheries science centers to expand fisheries science capacity, including fisheries information, from the Territories of American Samoa and Guam, and the Commonwealth of the Northern Mariana Islands, as well as the Territories of the U.S. Virgin Islands and the Commonwealth of Puerto Rico.

In FY 2014, NOAA will expand the Territorial Fisheries Science Initiative to enhance the agency's and local fisheries' science capacity in the territories at a level of \$1 million. Additionally, this year the Federal Funding Opportunity (FFO) for proposals under the FY13 Saltonstall-Kennedy (S-K) Grant Program, issued on July 31, 2013, identified "Cooperative Research in U.S. island territories and commonwealths" as a priority. This is the first year that Territorial Fisheries Science is included as a priority in this FFO to indicate an increased emphasis on these geographies within the S-K competition.

In addition, as part of our fisheries science portfolio, the Pacific Islands Fisheries Science Center is conducting two NOAA ship-based surveys to the Mariana Archipelago this year. The NOAA ship *Oscar Elton Sette* will conduct fisheries science surveys (e.g., supporting resource assessments), cetacean surveys in support of our protected species mandates, and support for local agency projects, and the NOAA ship *Hi'ialakai* will focus on coral reef ecosystem surveys and, in the last leg, ocean acidification and vents work with our partners in the Marianas Trench Marine National Monument.

## **Looking to the Future**

### *Remaining Challenges*

It is critical that we maintain progress toward meeting the mandate of the Magnuson-Stevens Act to prevent and end overfishing and rebuild overfished stocks. Annual catch limits have been an effective tool in improving the sustainability of fisheries around the Nation, but managing fisheries using annual catch limits and accountability measures was a major change for some fisheries, and the initial implementation has identified some areas where we can improve that process. We continue to work with the fishery management councils to achieve the best possible alignment of science and management for each fishery to attain the goals of the Magnuson-Stevens Act. We will continue to develop our science and management tools, improve our stock assessments and monitoring efforts, and create more effective annual catch limits and accountability measures. In doing so, we must continue to ensure solid, science-based determinations of stock status and better linkages to biological, socioeconomic, and ecosystem conditions.

A primary goal in the Pacific Islands Region is to bring more data to the table and ensure the fishery management response to annual catch trends is appropriate. Many fish stocks in the Pacific Islands are managed in mixed stock complexes to make the best use of scarce data. The majority of fisheries in the region are extremely data limited, making it challenging to manage and monitor annual catch limits in the way Congress envisioned. These small-scale commercial, non-commercial, and subsistence fisheries are nonetheless critically important to the island communities. Our work, both under our normal operations and under the new Territorial Fisheries Science Initiative, involves basic life history studies as well as improving collection and compilation of fishery statistics. Of particular interest in our region is the development of alternative assessment approaches in our coral reef fisheries, integrating this new life history information into these otherwise data-poor assessments, and using human dimensions research in these communities. Collectively, these contribute to the Western Pacific Fishery Management Council's Social, Economic, Ecological, and Management uncertainty (SEEM) analysis used in annual catch limit

determinations. Aspects of the SEEM dimensions include the importance of the fishery, both socially and economically, consideration of the ecological importance of the stock or stock complex targeted by the fishery, and whether managers can effectively constrain catch to planned levels.

We value the important partnerships we have formed with the states, territories, fishermen, and other interest groups in helping address these challenges. These partnerships are critical to developing successful management strategies. Together with our partners, we continue to explore alternative and innovative approaches that will produce the best available information to incorporate into management.

It is also increasingly important that we better understand ecosystem and habitat factors, such as the effects of climate change, interannual and interdecadal climate shifts, ocean acidification, and other environmental regime shifts and natural disasters, and incorporate this information into our stock assessments and management decisions. Resilient ecosystems and habitats form the foundation for robust fisheries and fishing jobs. The Magnuson-Stevens Act currently provides flexibility for bringing ecosystem considerations into fisheries management. One example is the use of oceanographic information to identify overlaps between swordfish and loggerhead turtles in the North Pacific to provide advice on avoiding fishery interactions. Another is identifying the impact of ocean acidification on the vital coral reef ecosystems of this region.

### **Conclusion**

Because of the Magnuson-Stevens Act, the United States has made great progress toward sustainably and responsibly managing U.S. fisheries to ensure that stocks are maintained at healthy levels, fishing is conducted in a way that minimizes impacts on the marine ecosystem, and fishing communities' needs are considered in management decisions. Fisheries harvested in the United States are scientifically monitored, regionally managed, and consistent with 10 National Standards for fishery conservation and management. But we did not get here overnight. Our Nation's journey toward sustainable fisheries has evolved over the course of 38 years.

This progress has been made possible by the collaborative involvement of our U.S. commercial and recreational fishing fleets and their commitment to science-based management, improving gear-technologies, and application of best stewardship practices. NOAA Fisheries has established strong partnerships with states, territories, tribes in the continental United States, fishery management councils, fishing industries, including recreational and non-commercial fisheries, and fishing and shoreline communities. By working together through the highly participatory process established in the Magnuson-Stevens Act, we will continue to address management challenges in a changing environment.

To understand where we are, it is important to reflect on where we've been. We have made great progress but our achievements have not come easily, nor will they be sustained without continued attention. This is a critical time in the history of federal fisheries management, and we must move forward in a thoughtful and disciplined way to ensure our Nation's fisheries are able to meet the needs of both current and future generations.

Thank you again for the opportunity to discuss Pacific Islands fisheries science in the context of the progress we have made under the Magnuson-Stevens Act. I am available to answer any questions you may have. *Mahalo* (thank you).