



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
MARINE FISHERIES ADVISORY COMMITTEE  
Silver Spring, MD 20910

March 27, 2017

MEMORANDUM FOR: Samuel D. Rauch III  
Acting Assistant Administrator for Fisheries

FROM: Julie Morris *Julie Morris*  
Chair, Marine Fisheries Advisory Committee

SUBJECT: Marine Fisheries Advisory Committee Letter and  
Recommendations on Priorities and Opportunities

This memo transmits a letter from NOAA's Marine Fisheries Advisory Committee's (MAFAC) to Secretary Ross that discusses priorities for the National Marine Fisheries Service and its capacity to enhance our seafood supply, reduce our dependence on seafood imports, create jobs, and reduce the national trade deficit in seafood. The letter references and includes as an attachment our recent report on findings and recommendations to address current challenges in marine resource management.

This letter was approved by the Committee at our meeting held in Boston, Massachusetts from March 20-22, 2017 and we respectfully request that it be submitted to Secretary Ross for his consideration.

MAFAC members believe this Administration has a unique opportunity to contribute to recreational opportunities for all Americans, a thriving U.S. seafood industry, healthy ocean ecosystems, sustainable fisheries, and efficient and effective resource management.

MAFAC welcomes Secretary Ross and the new Administration, and we look forward to working with them.

Attachment



UNITED STATES DEPARTMENT OF COMMERCE  
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March 24, 2017

The Honorable Wilbur Ross, Secretary  
U.S. Department of Commerce  
1401 Constitution Ave., N.W.  
Washington, DC 20230

Dear Secretary Ross:

On behalf of the Marine Fisheries Advisory Committee (MAFAC), we welcome you and look forward to working with you in your new position as the Secretary of Commerce. The MAFAC is a federal advisory committee comprised of representatives from commercial and recreational fisheries, aquaculture groups, conservation interests, and marine resources professionals from around the U.S., charged with advising you on matters related to living marine resources. The priorities you have identified – pertaining to reducing the national trade deficit in seafood, growing jobs, maximizing sustainable fisheries yield, and increasing aquaculture production – are of vital importance to the U.S. seafood industry, and we look forward to working with you to make much needed progress.

MAFAC is concerned that certain actions by the Administration will affect NOAA's ability to act on these important priorities and carry out its core missions. **The President's proposed FY2018 budget outline calls for elimination of key programs and a hiring freeze followed by a permanent reduction in the federal workforce. If enacted, NOAA's capacity to complete its science and management duties necessary to produce maximum sustainable yield and increase aquaculture production will be severely diminished.** This in turn, will undermine the nation's capacity to enhance our seafood supply, reduce our dependence on seafood imports, create jobs, and reduce the national trade deficit in seafood.

As your stakeholders and advisors, we share your interest and stand ready to assist you in reaching your goals of growing domestic seafood production, decreasing the trade deficit, and growing jobs while maintaining the U.S. position of leadership as the producer of high quality, sustainable seafood. **We have recently prepared a concise set of recommendations on how to streamline regulations, speed permitting, and enhance seafood production. Our December 2016 recommendations report, *Abundant Seas: Making the Most of America's Marine Resources*, is attached.**

Again, welcome to the Department of Commerce, and we look forward to your leadership in advancing the critical missions of NOAA and NOAA Fisheries.

Respectfully,

Julie Morris  
Chair





# Abundant Seas: Making the Most of America's Marine Resources

December 2016

The Marine Fisheries Advisory Committee (MAFAC) is pleased to welcome the new Administration. We have prepared the following report to share our thoughts and recommendations regarding priority initiatives for marine resources with the transition team and incoming leadership of the Department of Commerce and NOAA. We are looking forward to working with you.

MAFAC was established in 1970 to advise the Secretary of Commerce on all living marine resource matters under the purview of the Department of Commerce. MAFAC members evaluate and assess national programs and priorities to provide recommendations and direction. MAFAC members possess a wide range of expertise on commercial and recreational fishing, aquaculture, seafood processing, seafood marketing and sales, consumer interests, resilience of coastal communities, and protected resources. MAFAC complies fully with the Federal Advisory Committee Act.

MAFAC members have identified these recommendations as those that are particularly pressing and which offer unique opportunities for this Administration to contribute to recreational opportunities for all Americans, a thriving U.S. seafood industry, healthy ocean ecosystems, sustainable fisheries, efficient and effective resource management.

NOAA asked the MAFAC to produce a stakeholders' consensus on the desired future state of domestic and international fisheries. "[Vision 2020](#)" was completed in 2007, updated in 2012, and it provides an overview of the existing trends, strengths, and challenges facing marine resource science and management. This report draws from and builds on the *Vision 2020* recommendations and identifies future actions and needs that are unfulfilled and can help guide NOAA senior management going forward.

This report presents an overview of fisheries and aquaculture in the United States, summarizes some of the major challenges to healthy oceans and thriving industries, and lists opportunities for the Administration to make important progress on addressing these challenges in the next four years. It also identifies actions and opportunities that the Committee feels the Administration could undertake in its first 100 days.

We stand ready to work with you and welcome opportunities to engage further on any of these or other matters that you may wish to pursue.

## OVERVIEW

The United States is a global leader in fish production and management and U.S. fisheries are the best managed fisheries in the world. Under NOAA's National Marine Fisheries Service (NMFS) management and the Magnuson Stevens Fishery Conservation and Management Act (MSA), the

U.S. has rebuilt 40 stocks since 2000. U.S. commercial and recreational fisheries are diverse, supporting 1.83 million jobs and approximately \$214 billion in economic activity annually<sup>1</sup>. Of the 313 federally managed stocks with known status, 91% are not experiencing overfishing, and each year more achieve rebuilt status.

The United States is blessed with an abundant and productive ocean environment. It is home to diverse ocean wildlife including whales and other marine mammals, sea turtles, and birds, in addition to prized commercial and recreational fisheries; and it helps to define the culture and character of our coastal communities from Kodiak, Alaska to Guam and the U.S. Virgin Islands to the Gulf of Maine. Management of fishery and other marine resources depends on the expertise of highly qualified managers, scientists, and administrators at NMFS, and is a collaborative effort amongst NMFS, States, Tribes, and stakeholders whose interests and goals are interrelated. All work together closely to preserve the balance between sustainable use and conservation of fish stocks, habitat, and protected resources. Successful fisheries depend upon an orderly and consistent fishery management process, in which stakeholders (through Regional Fishery Management Councils) develop fishery management plans which are largely implemented through self-management as well as regulations. Disruptions to this management process can have a significant impact on the businesses and individuals who rely on sustainable and reliable access to oceans and fish resources. These conditions affect fishing communities more broadly and, compounded with other pressures on coastal communities, lead to irreversible losses of economic and physical infrastructure essential for a thriving coastal fisheries economy.

The U.S. imports over 91% of the seafood we consume; half of that is cultured overseas. Seafood imports added 227,000 jobs and created \$91 billion in economic activity but also added \$12 billion to our national trade imbalance<sup>2</sup>. Much of this imported seafood is captured or cultured in nations with fewer conservation and management regulations and weaker enforcement than the U.S. U.S. seafood consumers demand high quality, safe, sustainably harvested seafood, and agencies in the Departments of Commerce, Homeland Security, and Agriculture now work collaboratively to ensure imported seafood meets those expectations.

The World Bank and the U.N. Food and Agriculture Organization project that population increases and growth of the middle class in developing countries will cause the global demand for seafood to exceed the global supply by approximately 50 million metric tons in 2030<sup>3</sup>. Global landings of wild fish have remained stable at approximately 95 million metric tons. Aquaculture is a different story; from 2005 until 2014, global aquaculture production grew from 57.8 million metric tons (worth \$70.1 billion) to 101.1 million metric tons (worth over \$166 billion). U.S. production, on the other hand, dropped from 513,000 metric tons (\$896 million) to 425,000 metric tons (\$1.14 billion)<sup>4</sup>. To keep seafood affordable and realize the attendant health benefits, we must continue to manage wild stocks sustainably and increase safe and environmentally responsible aquaculture production. There is a need and the latent capacity for significant expansion in U.S. aquaculture production to meet domestic and global seafood appetites. One

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<sup>1</sup> NOAA Fisheries. 2016. [Fisheries Economics of the United States, 2014](#).

<sup>2</sup> NOAA Fisheries. 2016. [Fisheries Economics of the United States, 2014](#).

<sup>3</sup> World Bank. 2013. [Fish TO 2030: Prospects for Fisheries and Aquaculture](#).

<sup>4</sup> U.N. Food and Agriculture Organization, Fisheries and Aquaculture Information and Statistics Branch. December 2016. Data includes freshwater, coastal and marine aquaculture.

example is aquaculture production of oysters, which has doubled in the last five years. Offshore mussel farming could present similar opportunities if property rights issues are resolved.

## CHALLENGES

Management of fisheries, aquaculture, protected resources, and ocean ecosystems is a challenging and complex endeavor. The challenges listed here are by no means exhaustive. However, concerns about environmental change, outdated data collection and management systems, regulatory barriers, and barriers to trade are significant, widespread, and shared by industry, government, and conservation interests.

For fisheries managers, changing climate and ocean conditions present a perplexing problem because of the different ways these changes can affect fisheries, habitat, and protected resources. More than two-thirds of respondents to a recent MAFAC survey reported being “very concerned” about the impacts of environmental change on fisheries, aquaculture, and coastal communities. Changing ocean temperatures and habitat are leading to observed changes in fish distribution and abundance that make the management of those species under the regional fisheries management councils increasingly difficult and uncertain. Ocean chemistry is changing as waters become more acidic and may be affecting organisms with calcium carbonate exoskeletons - such as corals or shellfish - and associated ecosystems. The future extent of spatial shifts and productivity and other changes is currently unknown, as are the potential associated costs and benefits to fishing communities.

Data about fish stocks and fisheries, both the “fishery independent” data collected by scientists and the “fishery dependent” data collected from fishermen’s reports, are essential ingredients to the periodic stock assessments that are the foundation of healthy, sustainable fisheries. And yet, these data and assessments are often too infrequent, incomplete, or inadequate to properly guide timely and appropriate management decisions for commercial and recreational fisheries. Moreover, as environmental conditions in the ocean and along U.S. coasts change – as has been observed the last few years – the types of information and analyses needed to understand the changes and impacts on fisheries as well as the associated management protocols will need to evolve. Fisheries in some regions of the country have moved to dynamic in-season fishery management driven by real-time data, an approach that has been demonstrated to address these challenges and more. Other regions lack the resources, capacity, or willingness to make this necessary shift. Coupled with archaic and sometimes intractable regulations, too frequently this situation has resulted in outdated or unnecessary constraints on fishing activity, leading to underutilization of healthy, sustainably managed fish stocks. Related to this, NOAA lacks a capital infrastructure budget to replace aging satellites, research vessels, and land-based fisheries-support facilities. This causes the agency to careen from emergency to emergency to fund critical budget-busting infrastructure investments and prevents the U.S. from realizing the best net economic benefit to stakeholders and the nation.

In too many cases, fisheries management rules and regulations are complex, inflexible, and expensive to implement. They can also make it difficult to respond quickly to new information and fail to provide incentives for the regulated community and their partners to find innovative ways to address resource challenges. Some regulatory changes can take years to implement resulting in lost income, wasted effort, and frustration in the regulated community. It is

challenging, particularly in recreational fisheries, to collect scientifically sound and trusted social, cultural, economic, and ecological information to support robust fisheries management. Aquaculture development is also constrained by an unworkable regulatory environment, the lack of a lead agency with the authority to grant permits in federal or state waters, and a lack of investment in fundamental science.

International trade barriers on fisheries products inhibit U.S. seafood producers from participating in foreign markets (e.g., barriers to shellfish exports to the European Union). Addressing these barriers would open the door to maximize value for American fisheries products, create jobs, and improve the trade balance. A number of factors including cheap labor, less restrictive foreign fishery regulations, and high U.S. demand for cheap proteins coupled with virtually no U.S. tariffs, give foreign companies producing seafood a distinct trade advantage over U.S. producers. This advantage is often so pronounced that many U.S. producers export large quantities of raw seafood to Asia for secondary and value-added processing so that it may be imported *back* into the US. Many Asian and E.U. countries charge tariff fees on U.S. producers that can exceed 20%. The U.S. demand for seafood has grown to a point where 91% of the seafood Americans consume is imported, creating a dependency for a huge segment of business and supply chain that, if suddenly disrupted, would have severe economic impact on seafood companies that sell *both* domestic and imported seafood.

## OPPORTUNITIES AND RECOMMENDATIONS

While significant challenges are presented above, current conditions offer extraordinary opportunities as well. Focused investments of time and resources to address these challenges have the potential to unleash dramatic increases in production and access, improvements in management efficiency, and reductions in costs for fisheries. For example, the projected global shortfall in seafood supply ensures that future markets for high quality U.S. domestic products will improve dramatically if trade barriers are reduced or eliminated. Improvements in fisheries management and expeditious aquaculture permitting will unleash innovation by entrepreneurs and encourage more efficient and higher value use of limited resources. Specific opportunities and recommendations for action are described below, and actions that can be taken in the first 100 days, are designated.

### *Recommendations*

#### **Data and science-based decision making**

Oceanic monitoring capabilities are improving and expanding as they have never before. These capabilities provide tremendous opportunities to accelerate the flow of recreational and commercial data from the docks to the databases to the scientists and managers. A multitude of agency databases cannot currently communicate with each other and should be modernized and integrated for comprehensive ecosystem and fishery data collection systems. This would help scientists and managers as they shift to improved multi-species stock assessment and embrace ecosystem-based fisheries management (EBFM), which in turn would increase commercial and recreational fishing opportunities while reducing uncertainty and regulatory delay. By improving monitoring, data integration, and data management capabilities we can speed the integration and incorporation of data from the docks to the managers, improving the responsiveness of the

management regime to real-time changes in fish stocks and landings, and achieving efficiencies in agency operations. By reducing regulatory delays through the replacement of obsolete, inefficient regulations with nimble and dynamic ones, the fishing community could begin to take better advantage of opportunities to capitalize fisheries and increase landings of and markets for underutilized and under-fished species without triggering overfishing. Increases in understanding of ocean ecosystems, improvements in technology for ocean observations, and interest and engagement by stakeholders, scientists and others in EBFM may also present managers with important opportunities and the wherewithal to anticipate, predict, and respond to large scale changes in ocean ecosystems.

- **In the first 100 days:** Direct NMFS to issue an updated policy directive on improving fisheries data systems, including the use of electronic technologies, with guidelines for data storage, sharing and aggregation and document retention.
- **In the first 100 days:** Direct the Assistant Administrator for Fisheries to initiate a regional stakeholder process (federal Councils and HMS) to identify and review fisheries regulations that are considered to be outdated, ineffective, or unnecessarily restrictive on harvest opportunities or that unduly constrict aquaculture development with no appreciable conservation benefits for fish stocks, habitats, or marine ecosystems.
- Accelerate regional adoption of data improvements through cross-regional knowledge exchanges that share tools and best practices across NMFS and Council staff and the fishing community and update key policies related to data collection and management (data retention, confidentiality, data storage, etc.) to provide clear and consistent guidance to regional managers, fishing interests, and service providers.
- Continue investment and support for EBFM, including science and planning and encouraging the incorporation of EBFM principles into traditional fishery management plans.

### **Flexible adaptive management**

So-called “framework actions” built into fishery management plans have successfully provided a mechanism for nimble and flexible adaptive management adjustments. However, these are underutilized in some regions. The advantages of framework approaches include predictable outcomes based upon agreed upon goals and objectives; a more predictable business model; and the timely ability to adjust to climatological variations, population dynamics, technological advances, and consumer demand. Since critical decisions are based upon goals and priorities established within a “framework-able” management plan over a protracted period of time, the overall administrative burdens are usually reduced substantially.

- Promote greater use of framework actions in fishery management plans with resource material and workshops for regional fishery management council staff and council members.

### **Seafood business and trade**

Improvements are needed in the regulatory and business environment for domestic aquaculture and wild capture fisheries to create jobs and economic activities in rural coastal communities. The projected global seafood deficit will create greater demand for both U.S. and foreign products. Elimination of trade barriers and embargos would greatly improve the ability of U.S. seafood producers and the aquaculture industry to participate in global markets and maximize the value of American aquaculture and wild caught fishery products. Although there is a strong

desire among U.S. harvesters and processors to achieve reciprocal fair trade, the necessary changes must be carefully thought through and implemented in a premeditated manner to account for this dependency and existing supply chains. Care should be taken to ensure this is done in a manner that does not inadvertently drive down U.S. per capita consumption, result in retributory tariffs by other nations, or destroy essential infrastructure and supply chains that are vital for the harvest, production, and distribution of U.S. produced seafood.

- **In the first 100 days:** Issue a presidential executive order designating NOAA as the lead agency with the authority to grant aquaculture permits and leases in the EEZ (with input from other federal and state agencies with relevant regulatory authority, jurisdictional oversight, and review requirements for coastal consistency).
- **In the first 100 days:** Convene a task group of industry leaders to identify and propose solutions to major trade barriers with seafood products.
- Clarify and streamline current aquaculture regulations and establish regulations for leasing in the exclusive economic zone to enhance the U.S. domestic aquaculture industry's ability to increase production of sustainable domestic seafood to meet growing national demand and compete internationally.
- Support research into aquaculture species biology and physiology to improve competitiveness, create jobs, and ensure economic benefits from sustainable domestic aquaculture development.
- The Secretary of Commerce should work with the Secretary of Agriculture to develop a comprehensive strategy to encourage and expand aquaculture opportunities inland, in freshwater, coastal, and marine waters.

## **Cooperative research and management**

Increasing use of cooperative approaches to both research and management can reduce uncertainty, improve communication, and create a culture of innovation and trust. This includes improving use of co-management with states and tribes and expanding cooperative research and cooperative management opportunities with industry and recreational stakeholders<sup>5</sup>. By increasing cooperation and eliminating overlapping regulatory jurisdictions, the nation can achieve greater regulatory efficiency among the many federal programs that regulate ocean management and fisheries production in the Departments of Commerce and the Interior. Additionally, fishing groups will be encouraged to find ways to meet conservation and management needs that work for their community's unique needs, thereby reducing uncertainty and offering new economic opportunities. These cooperative efforts generate a good rate of return on investment, as they identify efficiencies, enable members to take advantage of new market opportunities, and provide greater certainty and stability.

- Implement the recommendations in NMFS' 2015 report on cooperative research and management and continue to address the many barriers to cooperative science and management partnerships to pave the way to more streamlined and effective management with strong stakeholder engagement and compliance.

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<sup>5</sup> For more information on increasing use of cooperative research and management, please see NOAA Fisheries 2015 report [\*Cooperative Research and Cooperative Management: A Review with Recommendations\*](#).

- Support initiatives by commercial and recreational fishing groups and coastal communities to develop innovative cooperative management partnerships by creating a new Fishing Communities Investment Fund that will provide targeted grants and other assistance to these groups.

### **Support recreational fisheries**

In recreational fisheries there are numerous opportunities to empower anglers as resource stewards and to support recreational access to quality fishing using new information and tools. Importantly, new guidance to ensure decisions on allocations among sectors are periodically reviewed was released in 2016. Leaders in the saltwater angling community developed a shared vision identifying opportunities and offering recommendations for actions in the Morris-Deal Report<sup>6</sup>. Morris-Deal recommendations include: alternative management strategies for saltwater recreational fisheries and support for actions being taken by several fishery management councils to protect ecosystem health and function and improve sustainable harvest strategies for forage fish that are critical prey for many recreationally and commercially important species.

- Move Morris-Deal recommendations forward to help ensure healthy fish stocks and future harvest opportunity for millions of fishermen.

### **Recover protected resources**

A National Recovery Program Review<sup>7</sup> requested by NMFS in 2016 identified numerous opportunities for improving the recovery of the protected resources managed by NMFS. These include closely linking recovery actions to recovery criteria; clarifying recovery objectives and delisting factors; maintaining stable, well-functioning recovery teams to move recovery forward; and utilizing adaptive management approaches and partnerships to increase the success of recovery efforts.

- Revise the outdated 2004 Interim Guidance for Recovery of Protected Resources to implement the recommendations made in the 2016 program review would be a significant step toward protecting the iconic ocean wildlife Americans treasure.

Thank you for your consideration of our views. We look forward to working with you.

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<sup>6</sup> See "[A Vision for Managing America's Saltwater Recreational Fisheries](#)" prepared by the Commission on Saltwater Recreational Fisheries Management. February 2014.

<sup>7</sup> Consensus Building Institute. 2016. [National Marine Fisheries Service National Recovery Program Review](#).