

S. HRG. 113-717

**WEST COAST AND WESTERN PACIFIC
PERSPECTIVES ON MAGNUSON-STEVENS ACT
REAUTHORIZATION**

HEARING

BEFORE THE

SUBCOMMITTEE ON OCEANS, ATMOSPHERE,
FISHERIES, AND COAST GUARD

OF THE

COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

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JANUARY 30, 2014
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ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

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**WEST COAST AND WESTERN PACIFIC
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THURSDAY, JANUARY 30, 2014

U.S. SENATE,
SUBCOMMITTEE ON OCEANS, ATMOSPHERE, FISHERIES,
AND COAST GUARD,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Subcommittee met, pursuant to notice, at 10:06 a.m. in room SR-253, Russell Senate Office Building, Hon. Mark Begich, Chairman of the Subcommittee, presiding.

**OPENING STATEMENT OF HON. MARK BEGICH,
U.S. SENATOR FROM ALASKA**

Senator BEGICH. This hearing is called to order.

Welcome to all the witnesses and other guests to this hearing of the Senate Commerce Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard. This hearing marks the third in a series of hearings we are holding on the Reauthorization of the Magnuson-Stevens Fisheries Conservation and Management Act.

Today, we are focusing on the perspectives of the Pacific and the West Pacific regions. We intend to hold one more such hearing, in late February, in focusing on the North Pacific region encompassing my home state of Alaska.

The Magnuson-Stevens Act, or MSA, named after two forward-thinking members of this committee, provides the architectural framework for the conservation and management of the Nation's fisheries. MSA was last reauthorized in 2006, at which time significant improvements were made; most notably, the requirement that fishery management plans include annual catch limits and measures to ensure accountability if those limits are exceeded.

Another important improvement is the requirement that catch limits not exceed the fisheries levels recommended by the counsels, by their scientific and statistical committees. Provisions also provided fishermen and the counsel with new management tools to rationalize fisheries if they wish to do so. These reforms, combined with the rebuilding plan requirements added to the Act in 1996, have put us on a firm footing for the sustainable management of our fisheries resources.

Many now argue that finfish and shellfish caught under a Federal fisheries management plan are, by definition, sustainably caught. The 2006 reauthorization also made important changes to

the MSA aimed at improving the accuracy and reliability of data on recreational fishing activities so we can better manage fisheries that support charter and private recreational fishing, as well as commercial fishing.

This included the authorization of the new Marine Recreational Information Program and the National Saltwater Angler Registry. That said, implementing these reforms has not been easy. This should be no surprise because fish issues have never been easy. It has been said fisheries management isn't rocket science, it's actually more difficult. At least rockets follow the laws of physics, fish don't know calculus. Our challenge today is how to properly balance the need for responsible stewardship of our fisheries for future generations with the need of individuals, businesses and communities who rely on them.

Today, we will hear testimony from two distinguished panels of witnesses regarding MSA Reauthorization from the perspective of the Pacific and West Pacific, specifically addressing management issues in Washington, Oregon, California, Hawaii, and our nations and shore areas in the West Pacific.

We hope to learn more about the impacts the MSA is having on these regions' important fisheries, individuals, businesses, and communities who depend on them and how it all, in fact, can be improved. I look forward to hearing from our witnesses today about how these changes and updates to MSA are being implemented and what effects they're having.

As we get ready here before the testimony, I will say Senator Rubio is on his way and I may interrupt the sequences of testimony to allow him to do his opening. But let me also—look at that. I was trying to buy just a little bit of time.

[Laughter.]

Senator BEGICH. Timing is everything but let me, before I have the Ranking Member, Senator Rubio, make his opening, let me also say, as I said, this will be—we have one more hearing in this series that we've done in regards to the MSA Reauthorization. Once we are completed, we are trying to focus on the first part, the first week of March, to lay down a bill that would be a framework bill that would start us in the process of moving forward based on all the input that we have collected. We've tried to do this a little differently. Instead of laying a bill down and then having the hearings, we've tried to have the hearings to get input, and then craft a bill that recognizes these responses and also the interests that people might have.

So we're looking forward to that. And again, we're trying to shoot for the first week of March for people who are thinking of the timetable here.

So thank you very much.

Let me now introduce Senator Rubio, the Ranking Member from Florida, to say a few comments and then we'll go right into the testimony.

Thank you.

**STATEMENT OF HON. MARCO RUBIO,
U.S. SENATOR FROM FLORIDA**

Senator RUBIO. Thank you.

And I apologize for being late, but thank you for holding this hearing. I'm going to keep my statement rather brief because there might be members here that have a bigger focus given where they're located on the Pacific and West Pacific's fisheries. These fisheries I know admittedly less about, I know a lot more about the Atlantic side of the equation. But after reviewing some of the testimony of our witnesses, the common themes in reforming Magnuson are echoed again.

We've heard from people, both in the Gulf and in the South Atlantic, as well as the Northeast and the Mid-Atlantic, that greater flexibility and rebuilding timelines is a necessary reform in the next reauthorization. We've also heard the common struggles in managing data-poor stocks and the need, not only to address the shortcomings in our data, but also the need to remove annual catch limits where appropriate.

Several of our witnesses here today will raise that theme as well. So apparently it remains true that in every region these are issues. In addition to that, every region has its own unique issues. For example, tribal participation in fishery management is prevalent, particularly in the Pacific and I'm grateful to learn more about that relationship between the tribes and the state and Federal Governments and how that relationship can be possibly improved in the next reauthorization.

Additionally, the Pacific fisheries have a larger international component that presents unique challenges in management. So I think that's a unique aspect of it as well.

And finally, the concept of ecosystem management is more realized in the Pacific and in the Western Pacific. And today, we'll hear firsthand the challenges that are presented by that management style.

Now, I have a conflicting hearing in Foreign Relations on proliferation, so I'm going to try to balance that. They don't coordinate the meetings around here all that well in terms of that. But I do appreciate today's testimony. I've read most of it and I certainly hope it will inform us as we move one step closer to the reauthorization.

So, thank you.

Senator BEGICH. Thank you very much, Senator Rubio.

And let me ask Senator Schatz from Hawaii if he wants to give an opening and then we'll go to testimony.

**STATEMENT OF HON. BRIAN SCHATZ,
U.S. SENATOR FROM HAWAII**

Senator SCHATZ. Thank you very much, Chair Begich and Ranking Member Rubio, for having this important hearing.

I want to thank Arnold Palacios and Michael Goto for coming from Hawaii and from the Pacific to testify; to West Pac, for their assisting in preparation; and to Mike Gravitz and MCI.

Mr. Chairman, I'd like to congratulate the U.S. fishermen, NOAA Fisheries and environmental organizations. Under the current version of MSA, they've worked together to make American fisheries management the gold standard for the world. And we are seeing the measurable success of our policies.

According to NOAA Fisheries' most recent Status of Stocks Report from 2013, 10 percent of stocks are on the subject to overfishing lists compared with 14 percent in 2011. Nineteen percent are on the overfished list, compared with 21 percent in 2011. Six stocks, managed under rebuilding plans, have rebuilt to their target levels bringing the total number of rebuilt stocks to 32 since the year 2000.

We all know that the news is not all good, however. Although ten stocks were removed from the subject to overfishing list, three stocks were added. Similarly, while four stocks were removed from the overfished list, one was added.

So we need to be watchful for changes so that our fisheries can continue to be the powerful economic driver that they are for many of our coastal communities.

To me, though, these trends mean that although the overarching framework of MSA is working, there's room for growth. For example, we need greater focus on pirate fishing; we need more resources for science to address data-poor stocks and to understand the impacts of climate change; we need economic assistance for fisheries while they are being rebuilt; we need increased commitment to habitat stewardship to support healthy fishing stocks; and we need better enforcement of domestic and international law. I also believe that we should take a serious look at how NOAA Fisheries engages with communities, from fishermen to environmental groups and the public at large.

Hawaii and other Pacific Island communities would benefit from attention to all of these areas because they support proactive management of our healthy stocks and responsible fishing industry. Our fishing fleet embraces the traditional values of our Hawaiian culture to be responsible stewards of the resources we hold and trust for future generations.

To put it simply, our fishermen are not the major pressure our fisheries face. Rather, the more significant threats come from pirate fishing by foreign vessels, decline of coral reef habitat from climate change, and the challenge of enforcement over the vast reaches of the Western and Central Pacific.

And so I look forward to this hearing. I thank you, Chair and Ranking Member, for conducting this series of hearings on this critically important issue.

Senator BEGICH. Thank you very much.

Let's go ahead and go to the testimony. And again, we'd like to ask members to keep their testimony to five minutes and all your written testimony is included in the record and permanent part of the record to make sure that's noted for you all.

Let me first start with Will Stelle, West Coast Regional Administrator, National Marine Fisheries Service.

Mr. Stelle.

STATEMENT OF WILL STELLE, WEST COAST REGIONAL ADMINISTRATOR, NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE

Mr. STELLE. Thank you, Mr. Chairman, members of the Subcommittee. I appreciate the opportunity to testify.

What I'd like to do this morning with my time, first of all, is to—I won't try to summarize my testimony per se, but to speak directly to a couple of points, in particular interest either to us or perhaps to you.

Before doing so, I want to simply express Mike Tosatto's regrets that he is unable to join me here today. He is on unavoidable mandatory foreign travel on fisheries' business. I will do my best to represent him here today but I will defer. I don't have a lot of deep expertise in the Western Pacific and I will defer to Mike and his staff in responding to any particular inquiries you may have.

I think the major point that I'd like to recommend, to make to you this morning, is from a Pacific and Western Pacific perspective. We have a mature and functioning governance system for the management of marine fisheries. And it is fundamentally working. And therefore, I would recommend approaching reauthorization delicately and surgically.

Let me speak now to—I'll go into a couple of details both in the Western Pacific and also in the Pacific setting. In the Western Pacific, Senator your comments nailed it and what Mike Tosatto wanted to emphasize this morning is one particular challenge and that is the challenge of data-poor fisheries management. It is unavoidable, given the character of the fisheries themselves and the stocks themselves but we've got a challenge that is most poignant in the Western Pacific on trying to manage and implement our fishery regimes in highly distributed, small, highly diverse fisheries on stocks that are desperately data-poor.

Toward that, in meeting that challenge, Mike and NMFS are participating in a territorial science research initiative that is intending to try on a collaborative-basis to build better capability between us and the territorial governments in deepening the stock assessment and monitoring work that is going to be the essential building block for more effective management of these fisheries. And we remain optimistic in building that collaboration over the coming years.

We've got, I believe, happily in the 2014 appropriations, a million dollars slated to it. And hopefully, that's going to be productive seed money that we can leverage through other means.

Moving to the West Coast, I'd like to touch on several points. First of all, again we have a mature, highly functional and productive working relationship between the states, the feds, the tribal sovereigns, the industry, and the NGO community in making fisheries management work. And that's not just happy talk; it's reality. And many of us are proud at the accomplishments we are and continue to make. We hold ourselves to high ambitions but we're meeting those ambitions. That's not to say it's all happy talk and easy; it isn't. But fundamentally, we have a functioning system that works well.

We have, over the last several years, instituted in the groundfish fishery, a new catch shares program that, from my personal perspective, is stunning. And I've been in and around fisheries management about 30 years and this represents one of the most significant generational changes I've seen in the way we manage marine fisheries since I've been around. And let me tell you why.

Fundamentally, what it is enabling is greater flexibility by the participants in the fishery to fish when it makes sense for them to fish. We are no longer using the cruel tool of time in telling people when you can go out and when you got to come back; when you turn on the lights and turn off the lights in your fishing effort. We don't manage fishing effort and we don't manage fishing time. We manage fishing harvests. And you have the flexibility with your processors and your markets to go fishing when it's most advantageous to you. And that has effectuated huge power in the way individuals shape their activities on the ocean in order to maximize their profits, and maximize their efficiencies, and reduce bycatch. And it's really significant. And over the last 3 years, we have seen improvements in the fishery in terms of revenues, landings, and radical reductions in bycatch that we would not have ever imagined.

So again, I just want to put an exclamation point around the basic fact of what has been achieved here and we are all optimistic that this is but the beginning and there's more to come.

Senator BEGICH. Think——

Mr. STELLE. On——

Senator BEGICH. I need you to summarize because you're over your five. And I apologize.

Mr. STELLE. I am?

Senator BEGICH. Yes. Green goes to red. Red usually means——

Mr. STELLE. OK.

Senator BEGICH. So I apologize.

Mr. STELLE. Sorry.

Let me summarize by saying, we couldn't talk about fisheries without also talking about tribal treaty rights. So, please appreciate that we have deeply embedded co-management responsibilities with the tribes of the Pacific and the Western Pacific. And we are succeeding in the mutual execution of those co-management responsibilities across the board and it's an important facet of governance.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Tosatto and Mr. Stelle follow:]

PREPARED STATEMENT OF MICHAEL D. TOSATTO, PACIFIC ISLANDS REGIONAL ADMINISTRATOR AND WILL STELLE, WEST COAST REGIONAL ADMINISTRATOR FOR THE NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE

Introduction

Good morning, Mr. Chairman and Members of the Committee. Thank you for the opportunity to testify before you today. This testimony is being provided by Michael Tosatto and Will Stelle, the Pacific Islands and West Coast Regional Administrators 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.

Marine fish and fisheries—such as tropical tunas in the Western and Central Pacific and salmon, groundfish, sardine, and albacore in the Pacific off the U.S. west coast—are vital to the prosperity and cultural identity of coastal communities in the United States. U.S. fisheries play an enormous role in the U.S. economy. Commercial fishing supports fishermen, contributes to coastal communities and businesses, and provides Americans with a valuable source of local, sustainable, and healthy

food. Non-commercial and recreational fishing provides food for many individuals, families, and communities; is an important social activity; and is a critical driver of local and regional economies, as well as a major contributor to the national economy. Subsistence fishing provides an essential food source and is culturally significant for the indigenous peoples in the Pacific Islands. In addition, for many Tribes on the West Coast, their usual and accustomed fishing and harvesting activities of marine (and other natural) resources are guaranteed by Treaties with the United States. The co-management responsibilities required by these Treaties has effectuated an important additional facet to the management of marine resources under the Magnuson Act and other authorities and permeates the governance of marine resources on the west coast of the United States.

Our most recent estimates show that the landed volume and the value of commercial U.S. wild-caught fisheries remained near the high levels posted in 2011. U.S. commercial fishermen landed 9.6 billion pounds of seafood valued at \$5.1 billion in 2012, the second highest landings volume and value over the past decade.¹ The seafood industry—harvesters, seafood processors and dealers, seafood wholesalers and seafood retailers, including imports and multiplier effects—generated an estimated \$129 billion in sales impacts and \$37 billion in income impacts, and supported 1.2 million jobs in 2011. Jobs supported by commercial businesses held steady from the previous year.²

At the same time, recreational catch remained stable. Recreational fishing generated an estimated \$56 billion in sales impacts and \$18 billion in income impacts, and supported 364,000 jobs in 2011.³ Jobs generated by the recreational fishing industry represented a 12 percent increase over 2010.⁴

U.S. fisheries are producing sustainable U.S. seafood. The Federal fishery management system is effectively and responsibly managing fish stocks at biologically sustainable levels, and in cases where some stocks have become overfished, the system has been effective at rebuilding populations to healthy target levels. As of December 31, 2013, 91 percent of stocks for which we have assessments are not subject to overfishing, and 82 percent are not overfished.

The advancement of our science and management tools has resulted in improved sustainability of fisheries and greater stability for industry. Since passage in 1976, the Magnuson-Stevens Act has charted a groundbreaking course toward sustainable U.S. fisheries. The 2007 reauthorization gave the eight Regional Fishery Management Councils (Councils) and NMFS a very clear charge and new tools to support improved science and management. Key requirements mandated the use of science-based annual catch limits and accountability measures to better prevent and end overfishing. The reauthorization provided more explicitly for market-based fishery management through Limited Access Privilege Programs, and addressed the need to improve the science used to inform fisheries management.

The U.S. has many effective tools to apply in marine fisheries management. Yet, as we look to the future, we must continue looking for opportunities to further improve our management system. While significant progress has been made since the 2007 reauthorization, progress has not come without a cost to some. Challenges remain. Fishermen, fishing communities, and the Councils have had to make difficult decisions and absorb the near-term cost of conservation and investment in long-term economic and biological sustainability.

In some cases, as with the Hawaii longline fishery for the highly migratory species of bigeye tuna, such an investment is made in a broad international management context. Despite many years of reduced fishing levels, it has not yet produced the expected conservation benefits on a basin-wide scale. We need to continue to address management challenges such as this in the international arena and explore new opportunities in a holistic, deliberative, and thoughtful way that includes input from the wide range of stakeholders who care deeply about these issues.

Fortunately, overfishing has, for the most part, been successfully prevented on the West Coast. For the handful of overfished stocks that existed, some already have rebuilt and the rebuilding progress continues on others. Strait of Juan de Fuca coho salmon was declared rebuilt in 2012. Petrale sole is projected to be rebuilt in 2015. In the U.S. West Coast groundfish fishery, we are starting to see some return on

¹See NOAA Annual Commercial Fisheries Landings Database, available at <http://www.st.nmfs.noaa.gov/commercial-fisheries/commercial-landings/annual-landings/index>.

²See Fisheries Economics of the U.S. 2011. NMFS Office of Science & Technology, available at: http://www.st.nmfs.noaa.gov/economics/publications/feus/fisheries_economics_2011.

³Lovell, Sabrina, Scott Steinback, and James Hilger. 2013. The Economic Contribution of Marine Angler Expenditures in the United States, 2011. U.S. Dep. Commerce, NOAA Tech. Memo. NMFS-F/SPO-134, 188 p.

⁴See Fisheries Economics of the U.S. 2011. NMFS Office of Science & Technology, available at: http://www.st.nmfs.noaa.gov/economics/publications/feus/fisheries_economics_2011.

our conservation investments. As the overfished stocks that were restricting the fishery have rebuilt, overall catch levels have been rising, providing safe domestic seafood, more fishing opportunities, and jobs. These results lead us to conclude that the Magnuson-Stevens Act's call for close collaboration among NMFS, the Pacific Council, and all of our stakeholders is one of its greatest strengths and has been essential to the success of West Coast fisheries.

Our testimony today will focus on NMFS' progress in implementing the Magnuson-Stevens Act's key domestic provisions, and some thoughts about the future and the next reauthorization.

Implementing the Magnuson-Stevens Act

The Magnuson-Stevens Act created broad goals for U.S. fisheries management and a unique, highly participatory management structure centered on the Councils. This structure ensures that input and decisions about how to manage U.S. fisheries develop through a "bottom up" process that includes fishermen, other fishery stakeholders, affected states, tribal governments, and the Federal Government.

The Magnuson-Stevens Act guides fisheries conservation and management through 10 National Standards. These standards, which have their roots in the original 1976 Act, provide a yardstick against which all fishery management plans and actions developed by the Councils are measured. National Standard 1 requires that conservation and management measures prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery. Optimum yield is the average amount of harvest that will provide the greatest overall ecological, economic, and social benefits to the Nation, particularly by providing seafood and recreational opportunities while affording protection to marine ecosystems.

The Councils can choose from a variety of approaches and tools to manage fish stocks to meet this mandate—e.g., catch shares, area closures, and gear restrictions—and, when necessary, also determine how to allocate fish among user groups. These measures are submitted to the U.S. Secretary of Commerce for approval and are implemented by NMFS. Thus, the Councils, in developing their plans, must carefully balance the need for stable fishing jobs, ecological conservation, and societal interests to create holistically sustainable fisheries. A key aspect of this effort is to ensure that overfishing is prevented, and if it occurs, to end it quickly and rebuild any stock that becomes overfished. Other National Standards mandate that conservation and management measures be based upon the best scientific information available, not discriminate between residents of different states, take into account variations in fisheries and catches, minimize bycatch, and promote the safety of human life at sea.

Fishing communities are central to many Council decisions. Fishing communities rely on fishing-related jobs, as well as the non-commercial and cultural benefits derived from these resources. Marine fisheries are the lifeblood of many coastal communities in the Pacific Islands and West Coast regions and around our Nation. Communities, fishermen, and fishing industries rely not only on today's catch, but also on the predictability of future catches. The need to provide stable domestic fishing and processing jobs is paramount to fulfilling one of the Magnuson-Stevens Act's goals—to provide the Nation with sources of domestic seafood. This objective has even greater purpose now than when the Act was passed, as today U.S. consumers are seeking—more than ever—options for healthy, safe, sustainable, and local seafood. Under the standards set in the Magnuson-Stevens Act—and together with the Councils, states, tribes, territories, and fishermen—we have made great strides in maintaining more stocks at biologically sustainable levels, ending overfishing, rebuilding overfished stocks, building a sustainable future for our fishing-dependent communities, and providing more domestic options for U.S. seafood consumers in a market dominated by imports. Thanks in large part to the strengthened Magnuson-Stevens Act and the sacrifices and investment in conservation by fishing communities across the country, the condition of many of our most economically important fish stocks has improved steadily over the past decade.

We all share the common goal of healthy fisheries that can be sustained for future generations. Without clear rules based on science, fair enforcement, and a shared commitment to sustainable management, short-term pressures can easily undermine the social, economic, and environmental benefits that come from sustainably and responsibly managed fisheries. Though overfished stocks remain a challenge in some fisheries, as their populations grow and catch limits increase, we are beginning to see benefits to those resources, the industries they support, and the economy.

Progress in Implementation

Working together, NMFS, the Councils, coastal states and territories, treaty fishing tribes, and a wide range of industry groups and other stakeholders have made significant progress in implementing key provisions of this legislation.

Ending Overfishing, Implementing Annual Catch Limits, and Rebuilding

One of the most significant management provisions of the 2007 reauthorization of the Magnuson-Stevens Act was the mandate to implement annual catch limits, including measures to ensure accountability and to end and prevent overfishing in federally managed fisheries by 2011 (an annual catch limit is an amount of fish that can be caught in a year such that overfishing does not occur; accountability measures are management controls to prevent annual catch limits from being exceeded, and to correct or mitigate overages of the limits if they occur). Now, when developing a fishery management plan or amendment, the Councils must consider the actions that will occur if a fishery does not meet its performance objectives. As of December 31, 2013, assessments demonstrated that overfishing ended for 71 percent of the 38 domestic U.S. stocks that were subject to overfishing in 2007 when the Magnuson-Stevens Act was reauthorized.⁵ Annual catch limits designed to prevent overfishing are in place for all stocks, and we expect additional stocks to come off the overfishing list as stock assessments are updated in the coming years. The Magnuson-Stevens Act also includes requirements to rebuild any overfished fishery to the level that can support the maximum sustainable yield, and we have rebuilt 34 stocks nationally since 2000.⁶

There are many examples of what fishermen, scientists, and managers can do by working together to bring back a resource that once was in trouble. In the Pacific Islands Region, NMFS, the Western Pacific Fishery Management Council, the State of Hawaii, and fishing communities have ended overfishing of the Hawaiian archipelago's deep-water bottomfish complex—a culturally significant grouping of seven species of snapper and grouper. This has enabled NMFS to increase annual catch limits for these stocks for both commercial and recreational fishermen and ensure these fish are available year-round.

On the West Coast, NMFS and the Pacific Fishery Management Council, the fishing industry, recreational anglers, and other partners have successfully rebuilt a number of once overfished stocks, including coho salmon, lingcod, Pacific whiting, and widow rockfish. These and other conservation gains, including implementation of the West Coast groundfish trawl rationalization program, enabled NMFS to increase catch limits for abundant West Coast groundfish species that co-occur with groundfish species in rebuilding plans. NMFS also worked collaboratively with the Pacific Council to develop an abundance-based harvest management framework for Endangered Species Act (ESA) listed Lower Columbia River Chinook. Ocean salmon fisheries are severely constrained to meet conservation objectives for Lower Columbia River Chinook and other ESA-listed salmon, but there is flexibility in how fisheries are managed to meet specific risk criteria. Not only was the Pacific Council's input critical to our decisions regarding how to manage risk and optimize fishery objectives, it helped integrate our process under the ESA with that of the Magnuson-Stevens Act under full "sunshine" so that all could follow that complex process.

But meeting mandates to prevent and end overfishing and implement annual catch limits can be very challenging where data are scarce, which is the case for many of the stocks in the Pacific Islands region, particularly those species being fished in the coral reef ecosystem. The agency has begun the process of reviewing the National Standard 1 guidelines, which were modified in 2009 to focus on implementing the requirement for annual catch limits. This was a major change in how many fisheries were managed, and we want to ensure the guidance we have in place reflects current thinking on the most effective way to meet the objectives of National Standard 1, building on what we and the Councils have learned. A May 2012 Advance Notice of Proposed Rulemaking was followed by an almost 6-month public comment period where we asked for input on 11 topics addressed in the guidelines. We received a significant amount of input, and are in the process of working through the comments and developing options for moving forward, be it through additional technical guidelines, regulatory changes, and/or identifying issues for discussion as part of a reauthorization of the Magnuson-Stevens Act.

⁵ See Fish Stock Sustainability Index. This report was the source for the underlying data, but the numbers presented here were compiled specifically for this hearing. The report is available at: <http://www.nmfs.noaa.gov/sfa/statusoffisheries/2012/fourth/Q4%202012%20FSSI%20Summary%20Changes.pdf>

⁶ See Fish Stock Sustainability Index. Available at: http://www.nmfs.noaa.gov/sfa/statusoffisheries/2012/fourth/MapRebuiltStocksCY_Q4_2012.pdf

Improvements to Science and Recreational Fishing Data

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 individuals and groups that rely upon fishing. NMFS is committed to generating the best fishery science—biological, ecological, and socioeconomic—to support the goals of the Magnuson-Stevens Act. To achieve the goals of the Act, we must conduct the research and analyses necessary to understand 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 and avoid potentially reduced annual catch limits, resulting in lost economic 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. 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 the diverse and small-scale fisheries; and the limited NMFS presence in the territories have all contributed to the current shortcomings. This initiative also is intended to address these shortcomings and improve the quality and reliability of Pacific Islands Region stock assessments and increase stakeholder participation in the process.

The Magnuson-Stevens Act required improvements to recreational fisheries data collected by NMFS for use in management decisions. In October 2008, NMFS established the Marine Recreational Information Program (MRIP) to improve recreational fishery data collection efforts, consistent with the Magnuson-Stevens Act requirement and the 2006 recommendations of the National Research Council. MRIP is a national system of coordinated regional data collection programs designed to address specific needs for improved recreational fishing information. One major component of this program is the development of a national registry of anglers that, in the West Coast Region, relies on data from state-issued fishing licenses. This registry is being used in a series of pilot studies to test more efficient mail and telephone surveys for the collection of data on recreational fishing activity. Based on the results of these studies, NMFS expects to be ready to implement new registry-based survey designs in 2015.

MRIP is also developing and implementing numerous other survey improvements to address the National Research Council's recommendations, including improvements in estimation methodologies, shoreside survey design, and for-hire fishery data collections. On the West Coast, the states have taken the lead following the National Research Council's recommendations to improve on the Marine Recreational Fisheries Statistics Survey by fielding their own surveys through cooperation with NMFS and the Pacific States Marine Fisheries Commission. Since 2010, California has been using the Automated Licensing Data System to issue and record all fishing licenses and to include those anglers in the national registry of anglers. A variety of survey methods have been used to estimate catch and effort for salmon and non-salmon fisheries in Oregon and Washington, including the Oregon Recreational Boat Survey, Shore and Estuary Boat Survey, and Washington Ocean Sampling Program. These surveys along with angler telephone surveys, commercial passenger fishing vessel logbooks, and telephone surveys are used to estimate recreational catch and effort on the West Coast. MRIP funding has been used to look for ways to adequately sample pulse fisheries such as the thresher shark fishery in Southern California. There has also been a focus on improving accessibility to the data held in the Recreational Fisheries Information Network.

Improved fisheries science also relies on data collected by fisheries observers as well as collaborative research with non-government partners. Adequate observer coverage also is critical for improving our bycatch data, and the biological samples collected by observers are used in stock assessments and life history studies. National Standard 9 requires fishery management plans to minimize bycatch. In the Pacific, NMFS continues to work with the Councils, industry, academia, and other partners to conduct research and test new methods and gear that will make our U.S. fisheries in the Pacific even cleaner, more selective, and able to avoid interactions with marine mammals and sea turtles. Much of this is done through the Magnuson-Stevens Act's Cooperative Research Program, Bycatch Reduction Engineering Program, and the experimental fishing permits process. For example, in the recreational West Coast thresher shark fishery, biologists from the NMFS Southwest Fisheries Science Center, West Coast Region, and the Pflieger Institute of Environmental Research collaborated to find out how to improve the survival of released

thresher sharks. They found that the use of circle hooks rather than J-hooks greatly increases a shark's chances of survival after release, and these findings have been published and widely disseminated to anglers in southern California through presentations at fishing clubs and shows, along with the production of a best practices video posted on the NMFS website. In addition, NMFS has routinely worked through take reduction teams established under the Marine Mammal Protection Act to successfully identify measures to minimize bycatch and other impacts on sea turtles, cetaceans, and other protected species in the Pacific.

Limited Access Privilege Programs (LAPPs)

The Magnuson-Stevens Act authorizes the use of LAPPs, which dedicate a secure share of fish to fishermen for their exclusive use via a Federal permit. NMFS has implemented LAPPs in multiple fisheries nationwide and additional programs are under development.

While limited access privilege programs are just one of many management options the Councils can consider, they have proven to be effective in meeting a number of management objectives when they have broad stakeholder support. Both in the United States and abroad, such programs are helping to achieve annual catch limits, reduce the cost of producing seafood, extend fishing seasons, increase revenues, and improve fishermen's safety.

NMFS has two LAPPs in the West Coast Region: the groundfish trawl catch share program implemented in 2011 and the sablefish fixed gear "permit stacking" program started in 2001. The groundfish trawl catch share program has been remarkably successful in its first 2 years of implementation. Results from 2012 indicate a substantial reduction in bycatch, with fishermen catching more of their targeted species and fewer species that should be avoided. Because fishermen have more flexibility under a catch share program, they can be more selective in the areas they fish and how they target species. To catch fish in better condition and sell them at a higher price, fishermen are shifting their tactics. For example, trawl fishermen increased their use of fixed gear (*i.e.*, fixed pots that rest on the sea floor or baited hooks on miles-long lines) the first 2 years of the program. In 2012, 58 percent of sablefish revenue in the catch shares program was from fixed gear, up from 48 percent in 2011. The number of quota transfers in 2012—a good indicator of how fishermen are fine-tuning their quota holdings to better reflect their fishing plans—was double that of 2011. The total pounds of such vessel-to-vessel transfers in 2012 was 25 percent above 2011 and suggests that participants are planning earlier and becoming more comfortable with the individual fishing quota management system. This strong partnership will carry the West Coast Groundfish Catch Shares Program toward the common goal of healthy, sustainable fisheries and fishing communities. NMFS is hopeful that the increased planning and knowledge about the fishery will lead to the continued success of the program.

Looking to the Future

Remaining Challenges

Amid these successes, challenges remain. The Pacific Islands Region has made progress to end overfishing, but we face challenges when managing the numerous highly migratory stocks in the international arena, where other nations have fundamentally different goals and objectives. This is perhaps most evident in the Western and Central Pacific Fisheries Commission tropical tuna fisheries. Negotiated conservation and management measures were first put in place in 2008, but with poor compliance and other accommodations for the small island developing states, it is clear that not all of these measures are working. A long-term management strategy will require broad agreement, equitable application, and full membership compliance.

On the West Coast, although we have made great strides in creating biologically and ecologically sustainable fisheries, there are challenges with the economic sustainability of the fisheries. Many involve significant policy considerations about the future of coastal communities, international conservation commitments and trade, and, of course, budgets—not just federal, but state and tribal as well.

It is critical that we maintain progress toward meeting the mandate of the Magnuson-Stevens Act to 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 will continue to work with the 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 Pacific Islands 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. Looking ahead, we must continue to improve the quality and quantity of scientific data, continue progress made on stock assessment improvement plans, and continue to explore new and innovative management tools to achieve more biologically and economically sustainable fishery resources.

We value the important partnerships we have formed with the states, territories, tribes, 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. In 2005, NMFS worked in a public/private partnership with commercial fishermen, The Nature Conservancy, and the Pacific Fishery Management Council to reduce trawl effort and protect habitat off Morro Bay in California. The Nature Conservancy conducted a private buy-out of trawl permits that was complemented by protections for 3.8 million acres of essential fish habitat under the Magnuson-Stevens Act. The partnership continues today as NMFS and the Pacific Council provide regulatory support for Morro Bay fishermen and The Nature Conservancy in their development of local markets and management strategies so that the permits are utilized in the sustainable and long-term best interest of the community. On the West Coast, the Pacific States Marine Fisheries Commission has long been a key partner for us in managing West Coast fisheries. Recently, the Commission has been working with West Coast groundfish fishermen to install cameras on trawl vessels to test whether these and other electronic monitoring technologies can provide the same level of data quality currently provided by observers, at a lower cost.

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 habitat form the foundation for robust fisheries and fishing jobs. The Magnuson-Stevens Act currently provides flexibility for bringing ecosystem considerations into fisheries management. For NOAA and the Pacific Council, this flexibility allowed us to develop a non-regulatory Fishery Ecosystem Plan on the West Coast, completed in 2013. Under the organizing principles of the Fishery Ecosystem Plan, the Pacific Council is exploring measures to restrict the future development of new fisheries for forage fish species. If appropriate, forage fish protection measures would be implemented under the authorities of existing fishery management plans. This flexibility in the Magnuson-Stevens Act is one of the Act's strengths, allowing us to meet our responsibilities under the Act in concert with related legislation, such as the Marine Mammal Protection Act and the Endangered Species Act, to reduce bycatch of protected species to mandated levels. The alignment of measures to conserve habitat and protected species with measures to end overfishing and rebuild and manage fish stocks will be a key component of NOAA's success in implementing ecosystem-based fisheries management.

NOAA supports the collaborative and transparent process embodied in the Councils, as authorized in the Magnuson-Stevens Act, and strongly believes that all viable management tools should continue to be available as options for the Councils to consider when developing management programs.

The Next Reauthorization of the Magnuson-Stevens Act

With some of the largest and most successful fisheries in the world, the United States has become a global model of responsible fisheries management. This success is due to strong partnerships among the commercial and recreational fishing, conservation, and science and management communities. Continued collaboration is necessary to address the ongoing challenges of maintaining productive and sustainable fisheries.

The *Managing Our Nation's Fisheries 3* conference—co-sponsored by the eight Councils and NMFS—brought together a broad spectrum of partners and interests to discuss current and developing concepts addressing the sustainability of U.S. ma-

rine fisheries and their management. The conference was developed around three themes: (1) improving fishery management essentials, (2) advancing ecosystem-based decision-making, and (3) providing for fishing community sustainability.

We were excited to see a wide range of stakeholders represent many points of view, from commercial and recreational fishermen, to conservation and science and management organizations, to indigenous communities. Before the last reauthorization, we co-sponsored two of these conferences, and they played an important role in bringing people together and creating an opportunity to present ideas and understand different perspectives. We expect the ideas that emerged from this event to inform potential legislative changes to the Magnuson-Stevens Act, but the benefits are much greater than that. The communication across regions and Councils provided an opportunity to share best practices and lessons learned, and could also inform changes to current policy or regulations that can be accomplished without statutory changes.

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.

In 2007, Congress gave NOAA and the Councils a clear mandate, new authority, and new tools to achieve the goal of sustainable fisheries within measurable timeframes. Notable among these were the requirements for annual catch limits and accountability measures to prevent, respond to, and end overfishing—real game changers in our national journey toward sustainable fisheries that are rapidly delivering results.

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. We have established strong partnerships with states, tribes, Councils, and fishing industries. 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. We will take the recommendations from the *Managing Our Nation's Fisheries 3* conference, and look to the future in a holistic, comprehensive way that considers the needs of the fish, fishermen, ecosystems and communities. We look forward to these discussions.

Thank you again for the opportunity to discuss implementation progress of the Magnuson-Stevens Act. We are available to answer any questions you may have.

Senator BEGICH. Thank you very much.

Senator Cantwell, I don't know if you wanted to have any opening. I allowed others to do it and I know we have an 11:15 vote, so I'm going to—

Senator CANTWELL. I think you should keep going.

Senator BEGICH. Keep going. Very good.

Let me go to the next speaker. Donald McIsaac, Executive Director, Pacific Fisheries Management Council.

Thank you.

STATEMENT OF DONALD McISAAC, EXECUTIVE DIRECTOR, PACIFIC FISHERY MANAGEMENT COUNCIL

Dr. McISAAC. Chairman Begich and members of the Subcommittee, thanks for the opportunity—

Senator BEGICH. Is your microphone on?

Dr. McISAAC. Let's see here.

Senator BEGICH. Is it good?

Dr. McISAAC. Testing one, two, three.

Senator BEGICH. There we go. Yes.

Dr. McISAAC. We OK.

Senator BEGICH. Very good.

Dr. McISAAC. There we go.

Well, thanks again for the opportunity to testify. My name is Donald McIsaac. I am the Executive Director of the Pacific Fishery Management Council. The Pacific Council manages over 160 fish stocks off the coast of Washington, Oregon, and California.

We were the primary organization responsible for the *Managing Our Nation's Fisheries 3* conference, held here in Washington, D.C. last May. We were honored to have you, Mr. Chairman, as a featured speaker so thank you, again, for that.

As you know, that meeting looked at the successes and challenges of the MSA, drew over 600 attendees with diverse fishery backgrounds and interests, and produced 128 findings, or ideas, on improving marine fishery management. Since that big conference, the Pacific Council has spent many hours at two council meetings discussing its priorities on MSA Reauthorization. We managed to wind all those 128 findings and a variety of additional ideas down to 16 priorities listed in my written testimony. These represent notable priorities identified at this time, with the reservation for additional priorities and refinement of positions as the reauthorization process moves forward.

First, I'd like to emphasize the point that the Pacific Council believes that the MSA, as it currently stands, has been a success. It has worked well to ensure a science-based process that ensures long-term sustainable fisheries while preventing overfishing and mandating rebuilding of depleted stocks.

Under the Act, the Pacific Council has ended overfishing in West Coast waters on any and all stocks within 1 year of detection, has rebuilt seven depleted stocks, and is in the process of successfully rebuilding eight long-lived stocks that remain depleted; three of which are projected to be rebuilt in the next year. We have implemented a successful groundfish trawl individual quota catch share program that has been held up as a model for programs in other regions for its ability to reduce bycatch and increase economic yield as Mr. Stelle just alluded to. We annually craft ocean salmon fisheries that accomplish stock-specific conservation goals for a multitude of individual salmon stocks, including many listed under the Endangered Species Act. We've created an ecosystem fishery management plan which we are now in the process of implementing along with protections for unmanaged forage fish. We are successfully participating in international fisheries organizations to protect highly migratory tuna-like species and the West Coast fisheries that rely on them.

The current MSA has been a key driver of these successes. We believe large-scale changes to the MSA are not warranted, and any changes made to the Act should be carefully considered. Still, there is room for improvement. Despite the effectiveness of the MSA, the Pacific Council believes there are areas that can be refined in order

to improve marine fishery management in the United States and internationally.

Of the six higher priorities in my written testimony revising rebuilding time requirements is a very important one for the Pacific Council. Three improvements can be made. First, addressing the discontinuity associated with the 10-year rebuilding requirement. This is also known as the “Bermuda Triangle” of rebuilding requirements and this provision has been the subject of costly litigation and economic loss to West Coast fisheries. Second, providing direction to not chase statistical noise in administrating rebuilding plans, but rather deal with true significant changes in the status of each fish stock. Third, providing flexibility to properly accomplish rebuilding as soon as possible while taking into account the needs of fishing communities as currently phrased in the Act.

And the Act says, rebuild as soon as possible while taking into account the needs of fishing communities. This has been a subject of a court interpretation as nearly ignoring the needs of recreational, commercial, and tribal fishing communities until such a time as they have demonstrated a disastrous state. While fish conservation should trump immediate economic yield when stock productivity is at stake, there is a need for more flexibility for councils to properly take into account social and economic impacts to communities while reducing catch rates in a rational stock rebuilding plan.

It is important to note that the purpose that rebuilding programs are designed for is to ultimately help the same fishery dependent communities that might be devastated now if there’s not the right balance between proper conservation and the effects of those reliant on robust fisheries.

Last, let me highlight two of the second tier priorities in my written testimony, both in the area of improving management and international fisheries. First, we think it’s important to designate one Commissioner seat in the Inter-American Tropical Tuna Commission arena to represent the Pacific Council perspective. The Pacific Council has a dedicated seat in the Western and Central Pacific Fisheries Commission arena which we feel brings added value to the U.S. delegations when they debate conservation of North Pacific Albacore, the most important tuna species on the West Coast that happens to also have a cross ocean migration pattern that carries them through some intensive Japanese fisheries. The same kind of participation is important in the international organization dealing with West Coast fish that migrate southerly through fisheries off of Mexico, Columbia, and Ecuador.

Second, toward improving international cooperation with other countries that may not play by the rules as well as the United States, we feel it’s important for the MSA Reauthorization process to consider stricter imported seafood labeling requirements in the U.S. market.

Mr. Chairman, I see my time is up, so I won’t be able to provide the West Coast perspective on that other meeting this Sunday that involves the Seattle Seahawks—

[Laughter.]

Dr. McISAAC.—but I can assure you that is where the other Pacific Council members will line up on that question.

[The prepared statement of Dr. McIsaac follows:]

PREPARED STATEMENT OF DR. DONALD McISAAC, EXECUTIVE DIRECTOR,
PACIFIC FISHERY MANAGEMENT COUNCIL

Chairman Begich and members of the Subcommittee, thank you for the opportunity to appear before you to discuss the Pacific Council perspective regarding the Reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act.

My name is Donald McIsaac; I am the Executive Director of the Pacific Fishery Management Council. The Pacific Council manages over 160 fish stocks off the states of Washington, Oregon, and California.

The Pacific Council was the primary organization responsible for planning the Managing Our Nation's Fisheries 3 conference, held in Washington, D.C. in May of 2013. We were honored to have you, Mr. Chairman, as a featured speaker at that conference. As you know, that meeting looked at the successes and challenges of the Magnuson-Stevens Act, and drew over 600 attendees with diverse fishery backgrounds and interests. As a result of the discussions held at the conference, attendees produced 128 findings, or ideas, regarding the reauthorization of the MSA. While many of these ideas were not intended for statutory consideration, many were. Within these, some were quite minor, while others were more substantial. The findings are available on the Pacific Council website.¹

Since the Managing Our Nation's Fisheries 3 Conference, the Pacific Council has spent many hours at two Council meetings discussing its priorities regarding the reauthorization of the MSA. Details of those discussions are available on our website.² At our most recent Council meeting in November, we managed to winnow those 128 findings and several additional ideas down to several priorities outlined in this testimony. These represent notable priorities identified at this time, with the reservation for additional priorities and refinement of positions as the reauthorization process moves forward.

First, we would like to make the point that the Pacific Council believes that the MSA as reauthorized in 1996 and again in 2006 has been a success. The Act has worked well to ensure a science-based management process that ensures long-term sustainable fisheries while preventing overfishing and mandating rebuilding of depleted stocks. As a result, the Pacific Council has ended overfishing of any and all stocks within one year of detection, has rebuilt seven depleted stocks, and is in the process of successfully rebuilding eight long-lived stocks that remain depleted—three of which are projected to be rebuilt in the next year. We have implemented a successful groundfish trawl catch share program that has been held up as a model for programs in other regions for its ability to reduce bycatch and increase economic yield. We annually craft ocean salmon fisheries that accomplish stock-specific conservation goals for a multitude of individual salmon stocks, including many listed under the Endangered Species Act. We have created an ecosystem fishery management plan which we are now in the process of implementing, along with protections for unmanaged forage fish. We are successfully participating in international fisheries organizations to protect highly migratory tuna-like species and the West Coast fisheries that rely on them. The current MSA has been a key driver of these successes. We believe large-scale changes to the MSA are not warranted, and any changes made to the Act should be carefully considered.

Still, there is room for improvement. Despite the effectiveness of the MSA, the Pacific Council believes there are areas that can be refined in order to improve marine fishery management in the United States and internationally. The Council's priorities for MSA reauthorization are as follows.

Higher Priorities Matters

Revise rebuilding time requirements.

- Address the discontinuity associated with the 10-year rebuilding requirement.

¹ http://www.managingfisheries.org/2013-percent20documents/MONF_Findings.pdf

² For the September Council meeting, see materials under Agenda Item H.1 (<http://www.pcouncil.org/resources/archives/briefing-books/september-2013-briefing-book/#ecoSeptember2013>) and the Decision Summary Document (<http://www.pcouncil.org/wp-content/uploads/0913decisions.pdf>) For the November Council meeting, see materials under Agenda Item I.2 (<http://www.pcouncil.org/resources/archives/briefing-books/november-2013-briefing-book/>) and the Decision Summary Document (<http://www.pcouncil.org/wp-content/uploads/1113decisions.pdf>).

- Don't "chase noise" in rebuilding plans (in other words, temper immediate reactions to changes in stock assessments that may merely be statistical "noise," rather than a true signal of significant status change).
- Address problems associated with "rebuilding as soon as possible" in order to properly take into account the needs of fishing communities.

While a strict 10-year rebuilding requirement is appropriate in some situations, focusing on rebuilding in a certain amount of time can also result in overly-restrictive fishery management that is illogically and unnecessarily harmful to fishermen and fishing communities; it is apparent that more flexibility is needed to optimize multiple goals. The 10-year rule, where stock rebuilding must occur within 10 years if possible, can lead to an unsound, discontinuous policy that can grossly disrupt fisheries for little conservation gain. If a stock can rebuild in 9 years at a cost of closing all fisheries, this becomes a mandate. Paradoxically, the requirements for rebuilding a fish stock in worse condition, *e.g.*, one that requires 11 or more years to rebuild with no fishing, provides for more than 11 years to rebuild (11 years plus the length of one generation of the species), with obviously less economic disruption. This is illogical and potentially disastrous for some fishing-dependent communities.

In addition, uncertainty in stock assessments and rebuilding analyses for over-fished stocks has created a situation where seemingly small changes to analytical results can lead to expensive revisions in rebuilding plans and unwarranted consequences to fisheries and fishing communities ("chasing noise"). This disruption is especially problematic when analytical results vary small amounts due to assessment uncertainty, and vary both up and down without changes in true status over time. The current process needs to be revised such that a reasonable threshold exists for stock status changes before significant changes in management approaches are required.

The MSA requirement to rebuild as soon as possible, taking into account the needs of the fishery communities, has been subject to Court interpretation as nearly ignoring the needs of fishing communities until such time as they have demonstrated a disastrous state. Current administration of this requirement necessarily leads to large reductions in catch of directed fishery stocks that are being rebuilt, and can restrict mixed-stock fisheries when the rebuilding stock coexists with healthy stocks. It has been said that a solution may be as simple as changing the word "possible" to "practical." At any rate, there is a need for threshold clarity so as to allow Councils to properly take into account important social and economic impacts to communities when reducing catches in a rational stock rebuilding plan. It is important to note the purpose that rebuilding programs are designed for is to increase stock sizes to provide for biological stability and the attendant future economic benefits to the same fishery-dependent communities negatively impacted (and may even be required to endure a disaster) by the rebuilding program.

Explore more flexibility for fishery impacts on data-poor species when the current precautionary approach becomes the bottleneck for healthy mixed-stock fisheries.

One common management challenge is developing and implementing annual catch limits (ACLs) effectively when the requisite data are lacking, when no data collection program is in place, and/or when major natural fluctuations in stock abundance occur more rapidly than stock assessments can be updated. When less information about a stock is available, or the data are outdated, current requirements call for a Council to set a particularly low ACL compared to the theoretically maximum allowable catch, out of recognition of a higher level of scientific uncertainty. While this is a logical approach in some regards, there is concern it may be overly conservative in some situations. It can lead to severe economic consequences when a rarely-caught stock about which little is known appears occasionally in a healthy mixed-stock fishery, and a new, highly buffered ACL for this rare stock suddenly requires a large reduction in the catch of healthy species; this situation essentially creates a bottleneck species that closes or substantially reduces an otherwise healthy fishery.

There are times when the best available science is not sound enough for active fishery management decision-making; the current approach for data-poor species may occasionally fall into this situation. Further, the current approach may limit obtaining scientific information on stock performance under higher catch rates.

Better align and streamline the National Environmental Policy Act (NEPA) & MSA section 304(i).

While a mandate to include streamlining of the NEPA and MSA processes was included in § 304(i) of the 2006 reauthorization of the MSA, it has not yet been addressed. The current process is inefficient, requiring substantial additional work and process to satisfy duplicative NEPA and MSA mandates. This unnecessarily delays implementation of regulations, causes obsolescence of scientific information, and burdens management resources that could be used more efficiently.

Include a carryover exception to allow ACLs to be exceeded in order to carry over surplus and deficit harvest from one year to the next, provided there is a finding from the Scientific and Statistical Committee (SSC) that such a carryover provision will have negligible biological impacts.

As part of their business planning, fishermen in catch share programs need to know whether they may carry over surplus harvest from one year to the next; deficits are now routinely paid back the next year. In the past, there has not been a consistent policy application on this matter. If the SSC finds that carry-over will not adversely affect a fish stock, then it should be explicitly allowed.

Stocks later determined never overfished should not be held to rebuilding provisions.

The data and scientific approaches used to determine stock status evolve and improve, and revisions to past stock statuses are common. The best available science used to declare a stock overfished may later be improved and show that the stock was never overfished. In these cases, continuing to manage the fishery under rebuilding plan restrictions may no longer be necessary. However, the MSA does not explicitly exempt stocks from rebuilding plans when it is later determined the stock was never overfished.

For example, in 2000, a stock assessment indicated that widow rockfish on the West Coast were below the minimum stock size threshold (MSST) that triggers an overfished status designation. Accordingly, the stock was declared overfished and a rebuilding plan put in place. However, subsequent assessments in 2005 and 2007 estimated that the biomass had never dropped below the MSST, and thus the stock had never been overfished. Despite the best available science, uncertainty regarding MSA requirements and the assessment results caused the fishery to remain under a restrictive rebuilding plan until 2013. Continuing to manage widow rockfish under a rebuilding plan, even though the stock was never overfished, resulted in negative social and economic impacts to fishing communities and industry. It also represented a significant expenditure of Council resources to construct and maintain a rebuilding plan, and the new catch share program was unnecessarily complicated by the overfished declaration of widow rockfish and its subsequent rebuilding plan.

Provide flexibility in requirements and qualifications for observers.

Current requirements and qualifications for National Marine Fisheries Service certified observers may be too restrictive regarding formal education and full independence provisions. There have been difficulties in providing a sufficient pool of observers.

Lower Priority Matters

The Pacific Council has also identified the following lower priority areas that we ask you to take into consideration in drafting new legislation.

- Designate one Commissioner seat on the Inter-American Tropical Tuna Commission to represent the Pacific Council.
- Provide flexibility to address rebuilding requirements when environmental conditions may be a predominant factor in a stock's decline.
- Include a viable mixed-stock exception.
- Replace the term "overfished" with "depleted" to account for non-fishing causes of stock size below minimum stock size threshold.
- Consider a national standard for habitat that can more effectively minimize adverse impacts on essential fish habitat.
- Implement stricter imported seafood labeling requirements in the U.S. market.

- Enhance enforcement capabilities for international fisheries, including at-sea and in-port monitoring and enforcement, and providing assistance to developing countries in their enforcement capacity.
- Improve access to currently confidential harvest or processing information for purposes of enhanced socioeconomic analysis.
- Amend MSA language to change “vessels” to “vessel” in the illegal, unreported, and unregulated certification section.
- Make a consistent distinction between “overfishing” (a measure of fishing rate) and “overfished” (a measure of abundance).

Thank you again for the opportunity to testify before this Committee.

Senator CANTWELL. Well, Mr. Chairman, if I could just—

[Laughter.]

Senator BEGICH. As I earlier stated, Senator Cantwell had no opening statement so we'll move to the next thing.

Senator CANTWELL. I had too many constituents on this and the next panel to want to interrupt them. But on that point, I'm certainly hoping that Alaska and Hawaii throw in with Washington and the Seahawks since there are so many Alaskans who do regularly root for the Seahawks.

Senator BEGICH. That's right.

Actually, I will echo that and we are anxious for the game.

[Laughter.]

Senator BEGICH. Let's just say that. We like to say, right now in Alaska where the grass is green, the rest of the country is frozen. So thank you very much for your testimony.

Let me move to the next individual and it is Arnold—Is it Palacios? Chair of the Western Pacific Fisheries Management Council.

Please.

**STATEMENT OF ARNOLD PALACIOS, CHAIR, WESTERN
PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL**

Mr. PALACIOS. Chairman Begich, honorable Subcommittee members, on behalf of the Western Pacific Regional Fisheries Management Council, I thank you for the opportunity to provide testimony on our perspective on the reauthorization of the Magnuson-Stevens Fisheries Conservation and Management Act.

The Council strongly supports improvement to MSA that will enable the Council to conduct a more effective management and sustainable fishery development of fishery resources in our region. Before I begin my remarks, Mr. Chairman, I would like to call your attention to the attachments in our written testimony.

I have one message I want you to take away from my testimony today and that message is loss: L-O-S-S and how to reverse this trend, loss of fisheries, loss of fishing grounds, loss of opportunities. Now the United States has the largest EEZ in the world and the Western Pacific region represents half of this; however, only 6 percent of the seafood we consume is landed by U.S. fisheries. Clearly, there is something wrong with this picture.

We have lost the pioneering longline fisheries in the Mariana Islands and the Northwestern Hawaiian Islands lobster and bottom-fish fisheries. The American Samoa longline fishery, the second largest under Council jurisdiction, is on the brink. Competition from subsidized foreign fisheries, such as China, are catching the

same fish and driving down prices while operational costs for our fleets, labor, fuel, continue to increase. We are also deeply concerned about the Hawaii Longline Fishery as its bigeye tuna catch has been reduced by a third due to quota restriction and quota management by an International Tuna Convention.

I submit that the MSA should contain measures to level the playing field for our U.S. vessels that minimize bycatch, such as providing subsidies for fisheries development, fuel, access fees, low-interest loans, tax breaks, and reduce import tariffs. Apart from the MSA, we continue to bury our fisheries under the ESA, the MMPA, NEPA, Sanctuaries Act, Antiquities Act, EOs, and the list goes on and on.

About 90 percent of the spatial areas of MPAs listed in the United States are in Western Pacific. This is grotesque skew by any definition. Most of the marine monuments were already protected by their remoteness. Now the fishing opportunities are lost in an archipelago of paper parks, where our fishers are locked out forever. Further, closing fishing grounds means fishermen are subject to greater expense and they have to take greater risks to go fishing.

I submitted that the MSA should state that any restriction on the management of fishery resources that is necessary to implement the ESA or the MMPA must be implemented under the authority of the MSA, the Magnuson-Stevens Act. In addition, the Magnuson-Stevens Act should take precedence over National Marine Sanctuaries Act and the Antiquities Act in terms of spatial management of fisheries resources and habitats.

Mr. Chairman, despite these challenges, the Councils in the last three to four years have fulfilled MSA mandates through generations of ACLs including for large numbers of data-poor coral reef species. We continue to strive to improve our ACLs by developing innovative techniques incorporating catch and biomass data. We are committed to working with our regional office and science center to make these improvements, as well as providing more opportunities for our communities in the Western Pacific.

Mr. Chairman, we have some fundamental questions that I believe we should ask ourselves. Do we want a U.S. fishing industry, or are we about to see more fishing vessels up for sale, like the American Samoa longliners? Do we want fish on the table from American fisheries caught by American fishermen? If so, then it's time to take a long, hard look at the Magnuson-Stevens Act and the burden imposed by other statutes on our fisheries.

We understand that funding is scarce and doing-more-with-less is inevitable. However, we have a suggestion that could work and we ask your indulgence. We ask that future increases in our SK revenue be potentially allocated to fisheries development for our Nation's fisheries. Our government needs to recognize, we need to recognize, that we have the responsibility to foster sustainability of our nation's fisheries, including those in the far-flung islands in the Pacific, in the U.S. insular areas.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Palacios follows:]

PREPARED STATEMENT OF ARNOLD PALACIOS, CHAIR, WESTERN PACIFIC REGIONAL
FISHERY MANAGEMENT COUNCIL

Chair and Members of the Senate Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard, on behalf of the Western Pacific Regional Fishery Management Council (Council), thank you for the opportunity to provide this written testimony of the Council's perspectives of the reauthorization of the Magnuson-Stevens Act (MSA).

The MSA is a comprehensive statute that ensures marine resource conservation and strives to promote the Nation's fisheries. In past reauthorizations, and no doubt during this process, Congress will hear that there are "magical" solutions to make fisheries sustainable. However, the Councils have heard it all before in different guises, marine protected areas (MPAs), catch limits, catch shares, etc.; the next "panacea" will be no different than the ones that went before; they may work for some but not for others. Further, our record on fishery conservation, management and sustainability speaks for itself (see Attachments 1 and 2).

The core themed message the Council would like to convey through this testimony is one of *loss*:

- *Loss* of fisheries;
- *Loss* of fishing grounds;
- *Loss* of culture;
- *Loss* of perspective; and
- *Loss* of opportunity.

The Council believes that the solutions to these issues are as follows:

- Restoration of the primacy of the MSA for managing marine fisheries resources: any measures under other statutes that may restrict fishing (Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), National Marine Sanctuaries Act (NMSA), Migratory Bird Treaty Act (MBTA), Antiquities Act, Executive Orders, etc.), should be implemented under the authority of the MSA and in accordance with processes and time schedules required under the MSA.
- Improved funding for the Councils and better allocation prioritization of resources by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) to obtain data on MSA regulated fisheries and on protected species and habitats associated with these fisheries.
- Support for U.S. fisheries in international fishery conventions and the recognition that any restrictive measures to be implemented for U.S. fisheries, such as catch or fishing effort limits, must not disadvantage U.S. fisheries to the benefit of less regulated foreign fisheries.
- Recognition that some fishery resources are grossly underutilized and not contributing to optimum yield (OY) as specified in the MSA, and that any management measures implemented through the MSA or other statutes should not preclude the utilization of these resources at a future date.
- Congressional directive to NMFS to make 60 percent of the entire Saltonstall-Kennedy Act funds available to the Councils and fishing industries to be employed for fishery research and development.

A. Loss of Fisheries

Fishing is primarily seen as a business, whether commercial for income or pursued for pleasure. It is a major employer and generator of revenue. However, our Nation has become so obsessed with overfishing and endangered species conservation that we are sleepwalking while U.S. fisheries are lost, one by one. When the MSA was last reauthorized the United States imported 80 percent of its seafood; now we import 94 percent. This has serious implications for the Nation's food security and national security as we become increasingly reliant on imported seafood.

Fisheries play an important role in the food supply and provide a source of protein for millions of people worldwide. A loss of fisheries is a loss of this protein and has to be balanced by production from other sources, particularly land-based proteins. The eminent fishery biologist Professor Ray Hilborn has noted that, if lost fish production is compensated by cutting the rainforest to grow crops or cattle, the total biodiversity consequences will be surely negative.

Nevertheless, the United States continues to bury domestic fisheries under piles of regulations stemming not from not only the MSA, but also the ESA, MMPA, NEPA, NMSA, Antiquities Act, MBTA, Executive Orders, and international tuna convention conservation and management measures (CMMs). The list goes on and on. Further, the Department of Defense has a significant presence in the Western

Pacific, with a further major military build-up expected for the Mariana Islands. Activities by the military are already constraining fisheries with further proposed closures of waters used for fishing and navigation.

The bureaucratic burden can be measured by the NEPA documentation for our Pelagic Fisheries Ecosystem Plan (FEP). Where a few pages of commonsense text sufficed in the 1990s, we now draft hefty tomes to accompany even the smallest fishery management measure. Of course it is important to document what we are doing and why, but review and approval of plans and amendments are now unnecessarily tedious, taking two to three years to be approved, so management measures may be obsolete by the time they are implemented.

The 2006 reauthorization required NMFS, in consultation with the fishery management councils, to develop within 12 months of enactment new environmental review procedures. The new procedure would have to integrate MSA and NEPA in order to provide for timely, clear and concise analysis that is useful to decision makers and the public, reduce extraneous paperwork, and effectively involve the public. In 2013, NMFS issued a policy directive indicating that the processes outlined therein meet the MSA requirement to improve the current process. The Council, however, does not agree that the process envisioned in the directive meets the intent of Congress in the 2006 reauthorization, nor will it reduce paperwork and provide for timely, concise analysis. What the directive does do, however, is put the burden on the councils to prepare NEPA documents prior to taking final action.

As the public participation process and level of environmental review are largely duplicative between the MSA and NEPA, the Council would be in support of MSA reauthorization language that clearly states that fishery management plans and amendments prepared in accordance with MSA shall be considered in compliance with NEPA.

The Western Pacific is a paradox: the largest of the eight fishery management council areas, encompassing 1.5 million square nautical miles with the total land area of 3,398 square nautical miles (equivalent to about the size Rhode Island) comprising only about 0.2 percent of the ocean area and containing less than two million people, over half of them living on the island of Oahu (see Attachment 3).

Despite our size we punch above our weight. The Hawaii longline fishery ranks the port of Honolulu consistently within the top 10 fishing ports and often within the top five. It supplies half of the Nation's swordfish and 80 percent of the bigeye tuna landed in the United States. Hawaii also consistently ranks within the top 10 states with respect to marine recreational fishery landings and is number one in recreational per-capita landings.

The late Senator Inouye used to emphasize that the islands and islanders are different from the rest of the U.S. His main point was "*we don't want more than anyone else we just want different!*" Our economies are simple: tourism, military, agriculture and fish. This is why there is specific language in the MSA which states that "*Pacific Insular Areas contain unique historical, cultural, legal, political, and geographical circumstances which make fisheries resources important in sustaining their economic growth*" (MSA Section 2: 104–297).

We've lost not only a pioneering longline fishery in the Marianas Islands but also the Northwestern Hawaiian Islands lobster fishery and the Northwestern Hawaiian Islands bottomfish fishery. The American Samoa longline fishery, the second largest fishery under Council jurisdiction is on the brink of collapse, due to competition from subsidized foreign fisheries such as China catching the same fish and driving down prices while operational costs for the domestic fleet continue to increase. We are also deeply concerned about the Hawaii longline fishery as its bigeye tuna catch has been reduced by a third due to quota management by an international tuna convention.

The Hawaii longline fishery, along with the American Samoa fishery, is an internationally recognized, iconic fishery for environmentally responsible pelagic longline fishing. Both fisheries have scored greater than 90 percent when evaluated against the United Nations Code of Conduct for Responsible Fisheries, and the American Samoa longline fishery is an important component of the Territory's small and fragile economy.

Many of the measures adopted for these longline fisheries—such as mandatory logbooks, observers, vessel monitoring systems, and measures to reduce seabird, turtles and marine mammal interactions—were landmark measures adopted by the United States in the Pacific and have since been adopted by other fisheries and by the Pacific tuna regional fishery management organizations (RFMOs) (see Attachment 2). However, effective and prudent management sometimes counts for very little within the highly competitive and politicized international fishery management arena. The American Samoa longline fishery and those of neighboring Pacific Island

countries have been driven into bankruptcy by heavily subsidized foreign longline fleets, particularly those from China.

The MSA contains measures that aim to level the playing field for U.S. vessels forced to minimize fish and protected species bycatch. But there is nothing to address the undercutting of U.S. fishing vessels by extensive subsidies to foreign fishing fleets for fishery development, fuel, access fees, low-interest loans, tax breaks and reduced import tariffs.

The MSA must address this if the Nation wants to continue eating fish caught by U.S. vessels in accordance with the MSA and its 10 National Standards. To further expand on this point two examples are presented below that highlight the need to support domestic fisheries and the marginalization of MSA through competing protected species statutes.

1. International Tuna Management: Level the Playing Field and Support Domestic Fisheries on International Level

In the Western Pacific Region, tuna is the largest and most valuable fishery resource. Tuna is considered a highly migratory species (HMS) and is managed internationally within the Pacific by two RFMOs: the Western Central Pacific Fisheries Commission (WCPFC) and the Inter-American Tropical Tuna Commission (IATTC). The United States is a contracting party to both RFMOs. Tuna and other HMS were brought under MSA management in the early 1990s. Since that time the Council has been managing Western Pacific Region tuna fisheries under its Pelagics Fisheries Management Plan (FMP). This was later converted into a FEP, along with the other Council FMPs. As a result of the Pelagics FEP management regime, the Hawaii and American Samoa longline fisheries are among the best managed and most comprehensively monitored longline fisheries in the world.

With HMS stocks, however, sound domestic management does not always lead to success. For example, the American Samoa longline fishery, which lands albacore tuna for processing at local canneries, has largely collapsed due to low catch rates, high operating costs and low ex-vessel prices. The fishery targets South Pacific albacore, which ranges from Australia in the West to Chile in the East. In recent years, Chinese vessels have been catching South Pacific albacore at record levels. These vessels have been operating in the high seas and the exclusive economic zones (EEZs) of South Pacific countries.

If there was a level playing field between these vessels and U.S. vessels operating out of American Samoa, then the fishery would likely not have collapsed—unfortunately there is no parity. Chinese vessels are receiving substantial subsidies for fuel, labor and other expenses, allowing them to operate at much lower costs. When albacore prices drop due to global market forces, U.S. vessels cannot compete with subsidized foreign fleets. This is contributing to the loss of U.S. fisheries. *The reauthorized MSA needs to provide the Secretary of Commerce with the ability to level the playing field, either through equivalent subsidies to U.S. fleets, the prevention of foreign subsidies through market access restrictions and/or trade sanctions.*

Another critical issue with respect to the lack of parity between U.S. fisheries and foreign fisheries are the stark differences in the level of monitoring, domestic implementation of RFMO measures and enforcement. This is critically important because the U.S. is a good citizen; it diligently monitors its vessels both within the EEZ and high seas, undertakes a public rulemaking process to implement conservation and management measures in regulations and then enforces the regulations and prosecutes violations.

The same cannot be said for most other members of the tuna RFMOs. What is particularly alarming is that the United States agrees on RFMO conservation and management measures that will have substantial economic impacts when applied to U.S. fisheries, while recognizing that other RFMO member fisheries will not be affected due to a lack of compliance monitoring and enforcement.

For example additional cuts for the Hawaii longline fishery were accepted by the United States in December 2013 at the 10th Regular Session of the WCPFC. Due to an already reduced quota for bigeye tuna, the Hawaii longline fishery faces closure every calendar year, and in past years (2009 and 2010) was closed from catching bigeye tuna in the Western and Central Pacific Ocean (WCPO). No other longline fleet in the Commission was subject to a similar closure.

The United States strictly enforced measures to the detriment of its fleet (amounting to tens of millions of dollars of lost revenue) while other countries are not subject to similar obligations with respect to the same targeted HMS stocks and flood U.S. markets with unrestricted catch.

The MSA should contain language that would prevent further reduction of U.S. fisheries catch and effort limits if other countries cannot demonstrate compliance with existing international conservation and management measures.

At around 1.5 million square miles, the Western Pacific Region represents the largest portion of the U.S. EEZ. The U.S. Coast Guard District 14 is responsible for conducting fisheries enforcement monitoring in this vast zone; however, available assets are only stationed in Hawaii and Guam. American Samoa, which is centrally located within South Pacific tuna fishing grounds and the only U.S. Territory in the Southern Hemisphere (the U.S. EEZ waters around Baker and Jarvis Islands are also in the Southern Hemisphere), does not have a U.S. Coast Guard Station with deployable patrol assets. American Samoa's post-harvest facilities include the largest U.S. tuna cannery on U.S. soil, and as such is a major fishery hub in the Western and Central Pacific.

As combating illegal, unreported and unregulated (IUU) fishing is a major issue within international fisheries management, the U.S. Coast Guard should homeport patrol vessels or aircraft that could help monitor the U.S. EEZ in the region. The last successfully USCG detected and prosecuted foreign fishing vessel incursion was in 2009. Patrol assets based in American Samoa would also serve an important search and rescue mission, whereas under current conditions, New Zealand assumes first responder responsibilities. American Samoa is home port to about 20 U.S. longline vessels, a dozen U.S. purse seiners and numerous other foreign fishing vessels. On average approximately 700 foreign fishing vessels make port calls in Pago Pago in any given year.

For the past several years, the U.S. Coast Guard has conducted a foreign EEZ shiprider program, where U.S. Coast Guard assets are deployed in foreign EEZs with foreign shipriders to conduct fisheries enforcement of national laws of the host shiprider. While this program likely supports a broader international mission within the region, time spent in the EEZ of other countries takes away from patrols that could be done in the U.S. EEZ including American Samoa and the Pacific Remote Island Areas of Jarvis, Howland and Baker Islands, and Palmyra. *The Council urges Congress to direct the USCG to prioritize monitoring of the U.S. EEZ over that of foreign EEZs.*

2. Protected Species Authorities: Endangered Species Act and Marine Mammal Protection Act Driving MSA Management

Federal fishery regulations for marine mammal conservation and management may be promulgated under MMPA authority independent of the fishery management council process. Circumvention of the Council process results in inconsistencies and conflicts with FMPs and the MSA National Standards, as well as a loss in public input and transparency.

For example, the recently implemented MMPA False Killer Whale Take Reduction Plan resulted in duplication of protected species workshop requirements in both MMPA and MSA regulations; the existing longline exclusion zone created under the MSA was modified for consistency with the new MMPA regulation without concurrence from the Council. Public input and the transparency of the process were also denied when the Council process was bypassed.

Regulation of Federal fisheries outside of the MSA, such as through MMPA, ESA and MBTA, continue to threaten the livelihood of U.S. fishermen and place domestic fisheries at a further disadvantage on the international playing field.

Congress should consider requiring that all fisheries-related marine mammal and other protected species conservation and management measures be promulgated through the MSA process, to ensure such measures are consistent with FMPs and the National Standards.

Limited scientific information on species protected under the ESA and MMPA lead to further unnecessary restrictions on U.S. fisheries. Assessment of fishery impacts on ESA-listed sea turtle populations are dependent on nesting beach trends due to the lack of abundance estimates for the entire population, creating a situation similar to assessing human health conditions by conducting a survey at a maternity ward. New species listings under the ESA have been proposed despite limited data about population trends or vulnerability to threats, as is the case with the proposal to list 82 species of corals. Infrequent stock assessment surveys for marine mammals are producing overly conservative population estimates, leading to an extremely low threshold of allowable take for U.S. fisheries under the MMPA.

In the entire Western Pacific only two MMPA dedicated marine mammal surveys have been conducted around the Main Hawaiian Islands since 2002. The consequence of these data limitations are precautionary approaches to protecting species under the ESA and MMPA while having little true conservation benefits to the species. For example, under MMPA promulgated regulations, two observed interactions with false killer whales within the Hawaii longline fishery in any given year results in the closure of the entire southern portion of the U.S. EEZ around the Main Hawaiian Islands (110,000 square nautical miles, or 42 percent of the U.S.

EEZ around the MHI). This is indicative of the draconian regulations in the absence of adequate data.

These data limitations for protected species result from questionable allocation of funding resources by NMFS and the USFWS to fulfill data needs to properly manage species under the ESA and MMPA. Yet, the resulting burden of potentially unnecessary regulations or closures is shouldered by U.S. fishermen.

The MSA should direct NMFS and the USFWS to better prioritize allocation of resources to obtain data on protected species and habitats associated with MSA regulated fisheries.

B. Loss of Fishing Grounds

About 90 percent of the MPA areas that have been established in the USA are found in the Western Pacific (see Attachment 4), an unfair skew by any definition. This is also probably the reason that since 2009, NOAA inventories MPAs by numbers per State/Territory rather than spatial extent of MPAs per State/Territory.

Our nation seems to care more about turning Pacific Island coral reefs into giant aquaria, finding spurious reasons to enclose more of our islands in 50-mile zones that ban most fishing activity while trumpeting these places as conservation icons. The banning of fishing in the Northwestern Hawaiian Islands has not made fish more abundant in the Main Hawaiian Islands as promised by the proponents of MPAs.

In the same vein, the closure of fishing in the Northwestern Hawaiian Islands was also supposed to protect monk seals. Ironically, they are crashing to extinction in the Northwestern Hawaiian Islands, where there is no fishing, but thriving in the Main Hawaiian Islands, where fishing abounds. In short, three quarters of the State of Hawaii has been closed to fishing for little to no net gain to the residents of the State. At the same time visitors are not lining up in droves to visit the Northwestern Hawaiian Islands Marine National Monument (MNM), the Marianas Trench MNM in Guam and Commonwealth of the Northern Mariana Islands (CNMI), the Rose Atoll MNM in American Samoa or the Pacific Remote Island Area MNM. Nevertheless, they were sold to the State of Hawaii and U.S. Territories by the Federal Government as money-making initiatives that would bring in millions of dollars.

Further, closing fishing grounds means fishermen are subject to greater expense and may have to take greater risks to go fishing. The National Institute for Occupational Safety and Health documented a correlation between increases in fishermen drowning in Guam with the increasing coastal fishery closures (<http://www.wpcouncil.org/wp-content/uploads/2013/02/Guam-MPA-drowning.pdf>). Do fishermen have to accept a greater risk of going bankrupt or dying to pursue their livelihoods?

Ironically, most of the areas that are now Marine National Monuments were already “protected” because of their remoteness as well as through previous existing conservation designations. Now the fishing opportunities they offered are gone, replaced with an army of bureaucrats managing an archipelago of paper parks, where fishers are locked out potentially forever!

The MSA needs to be strengthened such that its authority to manage fishery resources, including the access and rights to operate in EEZ waters by commercial and non-commercial fishing vessels, cannot be superseded by other Federal statutes, such as ESA or MMPA. The following section will provide greater detail on this problem and its effect on OY.

1. Ecosystem-Based Fishery Management and Optimum Yield Hampered by Fishery Closures

MSA Section 406 enhances fishery conservation and management by incorporating ecosystem considerations when managing fisheries. The NMFS Ecosystem Principles Panel in 1999 recommended the development of FEPs. The Council was the first to implement this type of plan in 2004 with its Coral Reef Ecosystem FMP and again in 2009 when it converted its FMPs to archipelagic-based FEPs.

These archipelagic-based comprehensive plans include provisions to consider ecosystem function, integrity, ecological linkages and effects of environmental forcing on managed marine resources. MPAs, MNMs, sanctuaries and “zones where fishing is not permitted” (an MSA term) are just one ecosystem-based management tool. No-fishing zones already exist as a provision in MSA Section 303(b)(2)(A), and fishery closures from other statutes like the Antiquities Act, NMSA and Presidential Executive Orders are in conflict with MSA provisions.

These conflicts stem from closures typically not being time bound and not evaluated or assessed for performance of the closure. MSA provides for a stricter evaluation of the performance of a closure and should be the primary statute that estab-

lishes fisheries closed areas regardless of biological, stock-related or diversity conservation purposes.

Monuments and protected areas are also hampering the achievement of OY (MSA Section 301(a)(1)). One of the largest MPAs in the world (Papahānaumokuākea MNM in the Northwestern Hawaiian Islands) shuts itself from commercial bottomfish fishing even though it was deemed sustainable. The loss of these bottomfish fishing grounds does not allow the United States to maximize the economic value of fisheries in the region, thus it will never be able to reach its OY.

This results in a significant economic loss for both the bottomfish industry and the entire State of Hawaii, plus increased imports and a higher seafood trade deficit. Planned closures under the Council process ensure that the economic impacts of these closures are evaluated as dictated by MSA Section 303(b)(2)(C).

Provisions should be added to the MSA to ensure that any marine areas in the United States that are closed to fishing are developed under the MSA.

C. Loss of Culture

The Western Pacific Region is home to many native island people who have fishing as part of their cultural and traditional heritage. These cultures and traditions date back more than 3,000 years, and, as with traditional non-instrumental Pacific Ocean navigation, what is preserved and practiced today is but a fraction of the huge knowledge base amassed from direct experience and empirical observation.

Through its experience of trying to rescue this traditional knowledge, the Council has found that many of the practitioners in Hawaii, American Samoa, Guam and the CNMI are elders who live on the margins of society, functioning without computers, e-mail or even bank accounts. What happens when native cultures disintegrate is well understood. The shelves of college libraries are groaning with the studies of people in the United States who have lost their culture and the social problems this brings in the creation of welfare dependency, spousal/child abuse, alcoholism and substance abuse.

When these cultures are lost, their knowledge of the fisheries is also lost and it's very difficult and sometimes impossible to bring them back. The loss of culture causes a break in the chain of skills and information that passed between generations, resulting in traditions that are gone forever or that must be revived using historical narratives, illustrations and guesswork.

The MSA needs to be strengthened to address the loss of traditional fishing and fisheries in the United States so that the knowledge and practices of indigenous cultures are not lost or destined for museums. Further, Congress should direct NOAA to provide funding to support existing MSA authorities, such as the Community Development Program and the Community Demonstration Project Program, and to recognize and add additional definitions such as customary exchange and subsistence fishing to the MSA.

1. The Need for Culturally Appropriate Definitions

In some parts of the United States, fish is culture. In the Pacific Islands, modernization and rigid Western forms of fisheries management have eroded cultural connections held fast by fishing; connections that revolve around providing food to family, bringing communities together and passing on traditional practices to future generations.

An important aspect of fishing in the U.S. Pacific Islands is the concept of *generalized reciprocity*. Fish are provided to others with no expectation of immediate specific or equivalent return, but rather with an understanding that at some point in the future the needs of the fisherman will be considered by the receiver and/or community in general.

To this end, the Council has recently worked to incorporate this concept and its related issues into its management practices by the defining and implementing of "customary exchange" provisions. In partnership with fishermen and within its advisory body and committee process, the Council has provided the following definition for customary exchange:

"The non-market exchange of marine resources between fishermen and community residents, including family and friends of community residents, for goods, and/or services for cultural, social, or religious reasons, and which may include cost recovery through monetary reimbursements and other means for actual trip expenses, including but not limited to ice, bait, food, or fuel, that may be necessary to participate in fisheries in the western Pacific."

Congress should amend MSA section 3 to support the implementation of this nationally important concept, describe customary exchange, and provide for its regional adoption based on local needs and practices.

Along those same lines, Pacific Islanders also engage in subsistence fishing, where fishing is conducted to provide food for the family and community. This is an important part of the culture, social cohesiveness and food supply for the people. The Council has already proposed the following definition for subsistence fishing:

“Fishing undertaken by members of a fishing community in waters customarily fished by that community in which fish harvested are used for the purposes of direct consumption or distribution in the community through sharing in ways that contribute to food security and cultural sustainability of the fishing community.”

The MSA should accommodate regional practices and norms for regional fishery sectors.

2. Provide for Cultural Conservation through the Western Pacific Sustainable Fisheries Fund

Section 204(e)(7) of the MSA establishes the Western Pacific Sustainable Fisheries Fund (SFF), which since 2010 has received funds from illegal foreign fishing fines and penalties to support projects in the Western Pacific Region. Further, the SFF may also receive funds from private donors such as philanthropic institutions. These funds have been used by the Council to provide for the development of fisheries and the preservation of cultural fishing traditions.

NMFS has determined that the current language of Section 204(e)(7) does not allow earmarking of donations to particular projects. The lack of earmarks may inhibit funding donations from philanthropic institutions unsure how their funds would be used and thus impede the Council’s ability to stop the loss of culture and the loss of fishing in the region.

Congress should amend Section 204(4)(7) to clearly allow donors to earmark funding for a particular Marine Conservation Plan project when contributions are provided to the SFF.

3. Make Minor Changes to the Marine Conservation Plans

Section 204(e) lists several conservation and management objectives to be included in authorized Marine Conservation Plans. Included in the list in paragraph (iv) are grants to the University of Hawaii’s Pacific Island Network. The Pacific Islands Network has ceased to function, so it no longer needs to be included in this section.

Minor changes to the MSA Section 204(e) should be made to remove reference to this Network.

D. Loss of Perspective

All too often in the evolution of MSA, the focus apparently has been on how to further restrict fishing. An obsession with overfishing has led ingenious avenues of litigation over federally managed fisheries. This forces Councils to manage all stocks at limits well below the maximum sustainable yield (MSY). New complex rules have been designed about peer review, fishery rebuilding plans, essential fish habitat, habitats of particular concern and ecosystem component species; all of which hinder the ability of the Councils to maximize the fisheries and their resources for the betterment of the Nation.

In the Western Pacific, politicians and non-governmental organizations are striving to declare a shark sanctuary in Micronesia, regardless of whether such an initiative is rationale or has popular support or not. However, the entire U.S. EEZ in the Western Pacific is a giant shark sanctuary. There are no dedicated shark fisheries that land sharks on an industrial scale anywhere in the region. The fishery that catches the largest volume of sharks, the Hawaii longline fishery, lets most of them go, and they are released alive.

Nevertheless, this shark sanctuary initiative has led to state and territorial laws banning the possession of shark fins, in direct conflict with the MSA, which contains provisions to safeguard sharks by requiring landings with fins attached. Another fishery opportunity is thus lost for our region. This loss is further compounded as our fisheries have often been the leader in developing fishery mitigation techniques, and a fishery may be able to provide the solution for sustainable shark fisheries. This solution would almost certainly be adopted by, or exported to, other nations, as happened with our approaches to bycatch minimization. Moreover, in the Mariana Archipelago, fishermen have been complaining for decades about fishery losses due to shark depredation.

As noted above, the MSA needs to be strengthened such that its authority to manage marine resources cannot be superseded by any other state or territorial statute that is in conflict with the MSA. A primary objective of the MSA is to achieve OY, with all other objectives subsidiary to this goal. The MSA was structured to provide

for regional flexibility, which has been largely lost in its implementation. Three examples of loss of flexibility within the MSA are explained below.

1. Annual Catch Limits Flexibility with Respect to Data Poor Stocks

a. Data-Poor Fisheries

The Western Pacific Region has more than 1,000 insular management unit species. The fisheries that harvest these species are small-scale with multiple gears and multiple landing sites. Scarce biological and demographic information limit conducting stock assessments to determine the status of the species. Without stock assessments for majority of these species, overfishing limits cannot be determined and thus annual catch limits (ACLs) are based on catch-only methods, which are also data poor. Because of the strict mandate for ACLs in the MSA, the Council is forced to comply and develop ACLs that may not meet the intent of the MSA.

ACLs in the Western Pacific region are based on the 75th percentile of catch time series. Exceeding an ACL in any given year, therefore, is unrelated to stock status and does not mean that a stock is being overexploited. ACLs should not be established under such circumstances unless compelling meta-data indicates stock depletion (e.g., traditional and local ecological knowledge, information on changes to habitat, etc.). Alternative methods that do not require reference points should be explored and allowed to be used. The complexity of the small-scale insular fisheries does not conform to the reference-point based status determination currently being enforced.

More flexibility should be given in the situation where data-poor stocks exist. National Standard 1 is too stringent given the data-limited nature of the Western Pacific fisheries. The Council concurs with the December 18, 2013, draft House Bill regarding defining “data poor stocks” and application to ACLs.

The MSA should distinguish between fisheries that are depleted from as a result of fishing and those that are depleted as a result of factors other than fishing.

The MSA should have exemptions from the ACL requirement for data poor stocks and add provisions for a time frame for which reliable fishery information needs to be obtained in order to remove the stock from a data-poor situation.

b. Fishery Data Collection Improvements

The Territory Science Initiative, introduced by Congresswoman Madeleine Bordallo in 2013, is a good first step towards initiating the data improvement process. The intent of this initiative is to support data collection projects and efforts in Guam, American Samoa, the CNMI, the U.S. Virgin Islands and Puerto Rico to increase locally based science, build scientific and monitoring capabilities and enhance fisheries science capacity. In order to continue to address the issues for data-poor stocks, these types of initiatives need to continue on a regular basis. The Saltonstall-Kennedy (SK) Grant Program also provides support to data collection, which is allocation via competitive basis on a national level. The Western Pacific is regionally unique in terms of data needs and requirements. Regionalizing the SK allocation and establishing a competitive process within each region would address the region-specific needs.

The Council concurs with the December 18, 2013, draft House Bill regarding the use of asset forfeiture funds to support improvements in fishery independent data collection.

The MSA should include a territorial data collection program with dedicated funding provided to the Territories to improve the amount and quality of fishery data being used for management.

c. Incentive for Coordinated State-Federal Annual Catch Limits

The biomass of the majority of Western Pacific reef and near-shore fish stocks is within State/Territorial waters. Thus, effective ACLs are contingent upon the State and Territorial governments to collaborate with the Council to establish complementary catch limits across the range of the stock.

An ideal management scenario is exemplified by the Main Hawaiian Islands Deep 7 bottomfish fishery where coordinated management is conducted by the Council, NMFS and the State of Hawaii. Federal and state waters open and close concurrently if/when limits are reached through each agency’s rulemaking process. Funding/staff incentives are needed for the State/Territories to develop complementary catch limits within the State/Territorial waters and to improve monitoring systems and data for more effective implementation of ACLs and better conservation of fish stocks.

MSA amendments to the ACL mandate should consider providing incentives for States and Territories to develop complementary regulations, including educational initiatives and improved fishery management capacity at the local level.

2. Recreational/Non-commercial Fishing

The way the MSA is currently written and implemented constrains the regional flexibility that was at the heart of the 1976 Fishery Conservation and Management Act.

For example, under Section 3(37), recreational fishing is defined as “fishing for sport or pleasure.” This narrow definition in practice is applied to almost all fishing that is not considered to be profit-driven. However, in the Pacific Islands, Alaska, and elsewhere, motivations for fishing can differ and overlap across fisheries. Commercial fishing is driven primarily by profit. Most other fishing is underpinned by a diverse spectrum of social and cultural forces.

It is imperative that the MSA explicitly recognize these motivations. The Council has adopted the term “non-commercial” fishing to capture fishing driven by factors other than the profit motive and refers to recreational fishing as “*fishing undertaken for sport and pleasure, in which the fish harvested, in whole or in part, do not enter commerce or enter commerce through sale or barter or trade.*”

This definition, along with the definitions for subsistence fishing and customary exchange, provides the basis for non-commercial fishing in the Western Pacific Region. These definitions are regionally sensitive and allow for the recognition of the various fishing motivations to be addressed appropriately in management decision-making. However, the Council continues to be constrained by the current inflexible definitions in the MSA.

The MSA should be amended to include regionally appropriate definitions for recreational, subsistence and other non-commercial fishing.

3. Mandate that the Cooperative Research Program Funds Regional Council Research Priorities

The Council and its Scientific and Statistical Committee annually review the performance of its fisheries managed through the FEPs. As part of this annual review, research needs are identified and prioritized for transmittal to NMFS as required by Congress.

Given this effort to coordinate research in the region, Congress should consider requiring the NMFS Cooperative Research Program (CRP) to fund and support projects that are identified by the regional Councils. In addition, the CRP should implement regional solicitations for projects and distribution of grant funds to improve equity in the distribution of funds among the regions and better meet regional research needs and priorities.

E. Loss of Opportunity

The great campaigner for civil rights and social justice Malcolm X said, “*The future belongs to those who prepare for it today.*”

One of the fundamental reasons Congress drafted the MSA has been lost, namely to encourage fishery development, reduce fishery imports and be a more self-reliant nation. Indeed, one of the main goals of the MSA is “to encourage the development by the United States fishing industry of fisheries which are currently underutilized or not utilized by United States fishermen, including bottom fish off Alaska, and to that end, to ensure that OY determinations promote such development in a non-wasteful manner.”

Today, how many of us in the United States have even considered that our fishery resources are under-utilized? Yet our Nation continues to import fish from fisheries where it has little to no influence. This Viking-style approach to commerce that conducts careful conservation at home and pillage abroad is unacceptable. We should not be exporting problems offshore to countries that may not have the capacity to effectively manage their share of the global fishery resource.

The United States has agreed to additional U.S. longline bigeye catch limits and limited U.S. purse-seine fishing on the high seas, while other much larger fishing nations with far greater impacts to bigeye tuna remain exempt from these international CMMs. This Council can tell you that fisheries in the U.S. Pacific Islands are free falling, not because of poor management, but because of overly complex management priorities coupled with a lack of mechanisms to maintain participation in an incredibly tough and difficult industry.

F. Conclusion

The United States has some fundamental questions to ask itself: Do we want a U.S. fishing industry? Do we want fish on our dinner tables from American fisheries

caught by American fishermen? Or are we about to see more and more fishing vessels up for sale, as our American Samoa longliners are today?

It's time to take a long hard look at the MSA and the burden that it and other statutes impose on our fisheries. Otherwise, the next time hearings are held for MSA re-authorization, the testimonies may well be eulogies on the *death* of U.S. fisheries.

Attachment 1. In order to meet its mission, the Council relies not only upon the 10 MSA National Standards, but also upon the following seven Guiding Principles:

1. Support quality research and obtain the most complete scientific information available to assess and manage fisheries;
2. Promote an ecosystem approach in fisheries management, including reducing waste in fisheries and minimizing impacts on marine habitat and impacts on protected species;
3. Conduct education and outreach to foster good stewardship principles and broad and direct public participation in the Council's decision making process;
4. Recognize the importance of island cultures and traditional fishing practices in managing fishery resources and foster opportunities for participation;
5. Promote environmentally responsible fishing and the utilization of sustainable fisheries that provide long term economic growth and stability;
6. Promote regional cooperation to manage domestic and international fisheries; and
7. Encourage development of technologies and methods to achieve the most effective level of monitoring control and surveillance and to ensure safety at sea

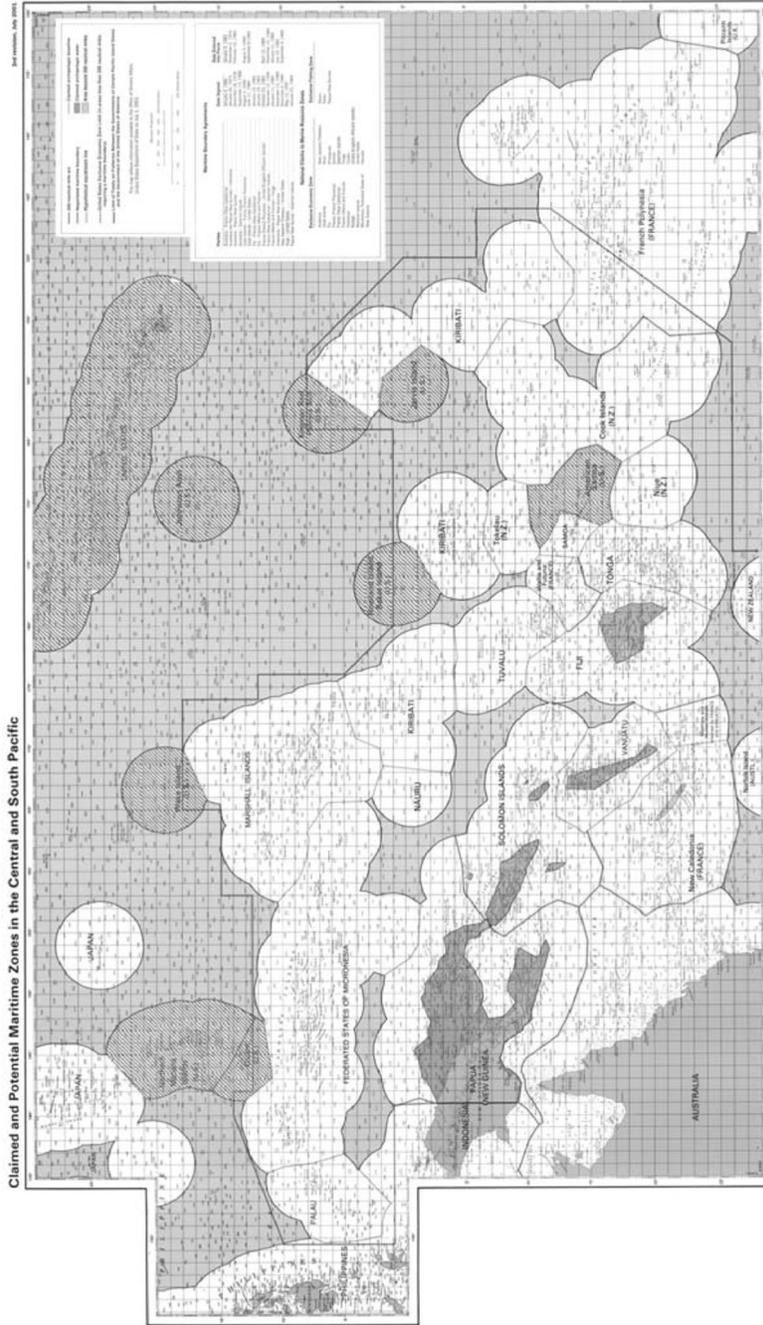
Attachment 2: Chronology of Council Achievements

The Western Pacific Regional Fishery Management Council has led the Nation in many areas of fishery management. Here are highlights of some of these "firsts."

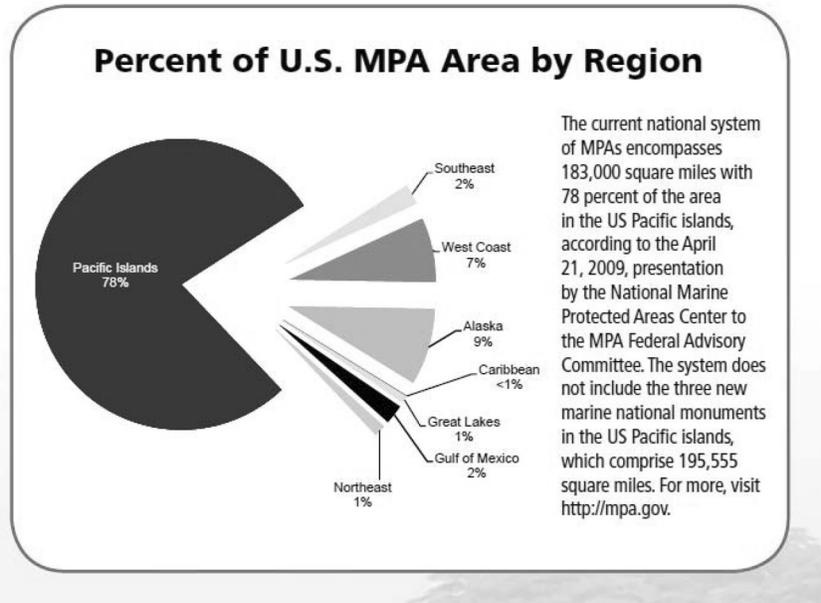
Year Initiated	Measure
<i>Species Interaction Management</i>	
1987	Establish the 50 nm protected species zone in the NWHI to prevent longline fishery and monk seal interactions.
2002	Introduced gear technology to minimize sea bird interactions with pelagic longlines.
2002	Hosted a series of International Fishers Forums to provide longline and other pelagic fishermen an opportunity to learn, exchange ideas, and develop solutions about sea turtle, seabird, marine mammal and shark bycatch.
2004	Required the use of gear technology to minimize sea turtle interactions with pelagic longlines.
2005	Established a Marine Mammal Advisory Committee in advance of the False Killer Whale Take Reduction effort.
<i>Pioneer Fisheries Management Approaches</i>	
1980	Implemented a fishery management plan for deep-water precious corals utilizing harvest quotas a series of area closures for spatial management.
1983	Banned bottom trawling and other potentially destructive and non-selective gear.
1987	Banned drift gillnetting throughout the Region.
1989	Established the Nation's first vessel-based limited entry program, for the Northwest Hawaiian Islands bottomfish fishery.
1990	Given management responsibility for tuna species.
1991	Introduced fully automated satellite-based vessel monitoring (VMS) in the pelagic longline fishery to support spatial management.
1996	Implemented a risk-based annual harvest limit management regime in the NWHI which limited harvest to only 13 percent of the exploitable population and 10 percent risk of over-fishing.
2001	Implemented the first Ecosystem-based Fishery Management Plan—the Coral Reef Ecosystem Fisheries Management Plan.

Year Initiated	Measure
2005	Developed a series of ecosystem workshops to integrate the biophysical, social, and policy attributes of fisheries management.
2010	First Council to transition all species-based Fishery Management Plans to place-based archipelagic Fishery Ecosystem Plans.
<i>International Fisheries Management</i>	
1997	Negotiated and implemented, with partners, a new international tuna fishery management organization in the Western and Central Pacific Ocean.
<i>Protected Species Management</i>	
2004	Developed, implemented, and have maintained a comprehensive sea turtle population recovery program.
2004	Convened a series of international conservation workshops for Pacific sea turtles.
<i>Education, Outreach, Communication</i>	
2003	Showcased renowned chefs known for locally-caught regional seafood cuisine.
2006	Developed annual high school summer course on marine science and fisheries management.
2007	Host annual teacher workshops on sustainable fisheries and student symposia on coral reefs and other topical issues in Hawaii and the U.S. Pacific Island territories.
2007	Held an international marine education conference that led to the establishment of an ongoing international marine educators network.
2011	Initiated community workshops and Fishers Forums on coastal and marine spatial planning.
<i>Fisheries Data</i>	
1991	Introduced comprehensive longline fishery logbooks and reporting requirements for pelagic longline vessels.
1991	Deployed full-time observers on pelagic longline vessels.
1998	Hosted the first symposium on Pacific game-fish tournaments.
1998	Used the satellite-based vessel monitoring (VMS) in the NWHI lobster fishery to report daily catches to monitor the annual harvest limit.
2007	Conducted and published a comprehensive study of shark depredation of pelagic longline catches.
<i>Spatial Management</i>	
1980	Implemented a fishery management plan for deep-water precious corals utilizing harvest quotas a series of area closures for spatial management.
<i>Traditional and Indigenous Consideration in Fisheries Management</i>	
2005-ongoing	First Council to use lunar calendars as a means to document traditional and marine resource use in Hawaii and other Pacific Islands
2006	Convened a series of traditional fishery management and marine resource use workshops (Puvalu series).
2007	Fomented a Traditional Knowledge Committee in the National Marine Educators Association.
2012	Coordinated and organized U.S. Pacific Island indigenous communities to be represented at the First Stewards bi-annual climate change symposiums in Washington, DC, which brings together American Indians, Alaskan Natives, and the Hawaiians, American Samoans, Chamorro and Refaluwasch of the U.S. Pacific Islands.
2013	Promoted socio-cultural aspects of non-commercial fishing, such as subsistence fishing and cultural exchange, and implemented them in regulation.

Attachment 3. Claimed and potential maritime zones (EEZs) of Western and Central Pacific Ocean



Attachment 4. Percent of U.S. MPAs by Region. Note this figure was created prior to the creation of the Marianas Trench, Pacific Remote Island Area and Rose Atoll Marine National Monumentss, which increased the Pacific Islands MPA percentage from 78 percent to 90 percent of the national total.



Senator BEGICH. Thank you very much for your testimony.
Next, I have Mel Moon, Director of the National Resources of the Quileute Nation. And thank you very much for being here.

**STATEMENT OF MEL MOON, DIRECTOR,
QUILEUTE NATURAL RESOURCES, QUILEUTE TRIBE,
LA PUSH, WASHINGTON**

Mr. MOON. Thank you.

[Speaking foreign language.]

Mr. MOON. Greetings.

[Speaking foreign language.]

Mr. MOON. Good morning.

My name is Mel Moon. I'm the Director of Quileute Natural Resources for the Quileute Indian Tribe in La Push, Washington. We're a tribe that's located in the Northwest Washington coast. And I'm happy to be able to speak with you in such good company.

[Laughter.]

Mr. MOON. I know Mr. Stelle and Dr. McIsaac, we've worked together quite a bit over time and I appreciate their company and their being here today. I also want to extend a thank you to Senator Cantwell for her work and support to the Quileute Tribe especially in our tsunami bill situation. The tribe was finding itself, in being located right at sea level, we were fighting the anxiety of the tsunami events and potentials that would disrupt our community, but we are very thankful for your help and forever grateful. Thank you very much.

I'm going to speak today about two topics in particular and perhaps start with a little bit of a background on the tribe's history with the Magnuson Act. In 1855, 1856, the tribes entered into treaties with the United States. The Quileute Tribe, in particular, entered into the Treaty of Olympia which was signed in 1856. In 1970, 1971, the tribes, with the U.S. Government Justice Department, filed an injunction against the State of Washington because the tribes were not able to exercise their fishing rights. They were being withheld from that.

1974, the U.S. District Court Judge Boldt ruled that the tribes did retain their original fishing rights, reaffirmed that those rights were still available. The state needed to desist and set the terms at 50 percent of the resource passing through the tribe's usual and custom areas.

In 1976, the Magnuson Act gets created and it has an introduction of people like Mr. Stelle and his staff and people from the Pacific Fishery Management Council; we began to have a relationship. And that was primarily with four tribes on the Washington coast; there is the Makah Tribe, who is in the Treaty of Neah Bay; there is the Quileute Tribe; the Hoh Tribe; and the Quinault Tribe who are part of the Treaty of Olympia.

Since that time, we've had a great deal of discussion and evolution about the meaning of our fisheries and how they should be prosecuted. And some of it is under, you know, terms of litigation, some of it is under terms of agreement, but it's gone through an evolution. I think that has at least created, in the end, a strong relationship.

So we are engaged in discussions with the Pacific Fishery Management Council and with the NOAA, the National Marine Fisheries Service Reps on a number of our fisheries. And some of our fisheries that we deal with, like our crab, black cod, salmon, halibut, groundfish, covers quite a large range. The difference, though, is that the four coastal tribes actually exercise treaty rights outside of the three-mile area of the state. So that creates a co-management relationship with the Federal agency, the NOAA National Marine Fisheries forum. Under that, we have regular discussions on government-to-government basis about our issues. But of late, we've had recent discussions with the council about representation and how that representation on the Pacific Fishery Management Council would be best for both sides in terms of communications and outreach.

A letter was sent out to all the tribal chairs. The response was mixed. And so, I think that kind of gave us a pretty clear indication that there's quite a diversity between the 25 tribes that may be affected. Our opinion is that we would like to see funding and support for the tribes to collectively create that representation structure with the PFMC process. It takes time, it takes discussion. You know, for me to present this is the answer, wouldn't solve the problem. So we need to have a backup, do a work group or do a subforum that answers the question, What is adequate representation? Because these tribes, some are executive order, some are treaty tribes, some are still just newly recognized, and some have off-reservation rights and some don't. So there's quite a diversity in terms of the makeup of the tribal interest.

The other issue I wanted to speak about was the essential fish habitat measures. A number of areas have been designated for special management considerations. We have several off in our usual and custom area for fishing; we're witnessing some changes that are happening in our area particularly in crab and black cod where the fish are no longer there. So we're starting to see displacement from other fisheries that are being shut down. We're starting to see the impact of perhaps bottom trawl fisheries that are displacing some of our principle economic fisheries, such as black cod and crab.

So I think we're going take a different look at EFH, there was a—does Marine Protected Areas need to be here? Well, we didn't think they needed to be. Does EFH need to be here? Well, I think we're now taking a second look at that. And again, I think we need resources, the tribes, in order to engage in this process adequately.

Thank you.

[The prepared statement of Mr. Moon follows:]

PREPARED STATEMENT OF MEL MOON, DIRECTOR, QUILEUTE NATURAL RESOURCES,
QUILEUTE TRIBE, LA PUSH, WASHINGTON

Thank you for inviting me to speak to you today. I am the Director of Quileute Natural Resources within the Quileute Tribe. I will be speaking about the reauthorization of the Magnuson Act modifications and recommendations which the Quileute Tribe, a signatory in 1856 of the Treaty of Olympia, recently presented to the PFMC. My talk is about fair and equitable tribal roles in the fisheries management scheme. I would also like to include some additional information and topics of interest I feel are relevant to the Magnuson Act reauthorization from the perspective of the four treaty tribes on the Pacific Coast of Washington, all of whom have reserved treaty fishing rights that extend into the ocean beyond state limits. At the PFMC

of November 2013 in Costa Mesa, the Quileute Tribe addressed two issues that we feel would impact and affect all four of these treaty tribes as well as the PFMC. The first concerns the tribal seat on the PFMC—how it is selected and operates. The second regards the Essential Fish Habitat review process. Further, I would also like to mention our concerns over U.S. trustee support and responsibility towards the west coast ocean treaty tribes, including timely notice and communication of matters directly affecting our treaty rights. These concerns cover a number of issues; for example:

- climate change;
- increased role in groundfish management decisions
- increased role in sustainability issues regarding fisheries of economic importance to tribes
- recognition of need for Disaster Relief

In the 1970s, the State of Washington was still arresting Indians for fishing in their treaty areas, but off-reservation. So in 1974, the tribes filed an injunction against the state, which was interfering with their treaty rights. This is the landmark case many of you know as the Boldt decision, formally called *United States v. Washington* (384 F. Supp. 312, W. D. Wash.) affirmed that the tribes with treaties negotiated by Isaac Stevens in the mid-1850s had *reserved, off-reservation* fishing rights in their Usual and Accustomed Fishing Grounds and each tribe was entitled to 50 percent of the fishery passing through its treaty area. Further, the treaty tribes were co-managers of the fishery with the state of Washington. This case was fully affirmed by the United States Supreme Court in 1979 (under a different name after joinder: *Washington v. Washington State Commercial Passenger Fishing Vessel Association et al.*, 443 U.S. 658). This is a living case; Paragraph 25 at the end leaves it open for subproceedings to keep refining our understanding of the treaty fishing rights because of their importance and complexity. Although the original case was about wild salmon and river fishing, subsequent subproceedings made it clear that hatchery fish and all the ocean species, finned or shellfish, are “treaty fish” as well.

Under the Boldt decision provisions, the Yakama, Quinault and in 1998 the Quileute are formally recognized as self-regulatory, having demonstrated their sufficient capacity. The Boldt decision opened the door for a formal tribal role in fisheries management—in fact, ordered it (field surveys, regulations), but despite this, it has been a struggle for the treaty tribes to have a meaningful role in decisions regarding their treaty rights and to protect their fishery.

For example, in the 1970s, the state of Washington was aggregating the salmon from seven major rivers or estuaries within the Treaty of Olympia (Quillayute, Hoh, Queets, Quinault, Humptulips, Grays Harbor, and Chehalis), in determining the allowable harvests for the ocean troll fishery. The state totaled all the needs of the coastal treaty tribes and then averaged them with a combined escapement goal. This was resulting in overharvest of some runs by as much as 70 percent. *Hoh v. Baldrige* (522 F. Supp. 683 (W.D. Wash. 1981) was the Federal court case that put an end to that practice so that now salmon must be managed on a river by river basis within this area. The tribes had tried to resolve this problem through PFMC, but it proved necessary to resolve the matter in Federal court.

The result is the annual North of Falcon process, which gives tribes full representation with the state in determining fishing seasons and developing a management plan founded on technical analyses by all parties, discussion, and negotiation. This is a good model for other forums. Because of this ruling and the required management terms presented and argued by the coastal tribes, the salmon within the *Hoh v. Baldrige* case area enjoy a non-ESA status, unlike many of the Puget Sound and Strait of Juan de Fuca stocks.

North of Falcon is held just before PFMC in the spring. Representation of tribal interests at PFMC has been more difficult. Only one tribal seat exists at present, from all states on the Pacific Coast and Idaho, regardless of distinctions between treaty tribes with ocean rights and tribes that fish under different circumstances. Over the years, we have had four tribal representatives to the PFMC: Guy McMinds of Quinault, Bill Yallup of Yakama, Jim Harp of Quinault and today Dave Somes of Makah. I personally know and have respect for all of these representatives but need to point out the misconception that all tribes are the same and have similar policy, so that one person can represent them. This is not the case for the states. Coming from different widely geographic areas, with different languages and customs, and fishing for entirely different stocks of fish, tribes have different needs. Some tribes operate under executive orders; some have treaties with reserved off-reservation fishing rights, and four in Washington have treaties with off-reservation

reserved rights in the ocean beyond three miles. The various treaties reflect and derive from these differences. Some tribes are still trying to obtain their original sovereign identity or restore it due to the termination policies of the U.S. government in the 1950s. While we are joined by the commonality that we are all-fish-eating people, the rights and concerns are vastly different.

In its earlier years, PFMC created an Indian Advisory Board. This was not workable because it was structured for west coast non-Indian discussion and did not include the ocean treaty tribes as members of that board. The Indian Advisory Board was later terminated after the PFMC consulted with the tribes and realized that the treaty tribes wanted to be on the Board. The state of Washington then offered one of its seats for one of the ocean treaty tribes to occupy. Since at least 1996, the PFMC, in accordance with 16 U.S.C §1852, has provided for a tribal seat (1 of 14 voting seats overall). Before North of Falcon, this was the only forum and process for ocean salmon management between the co-managers (State and Tribes). The PFMC has a far larger role than North of Falcon, incorporating a much larger area. It is critical for the diverse (more than 25) tribes to have a larger role in the process, as significant a role as they do have in North of Falcon. To that end the Treaty of Olympia tribes presented statements in Costa Mesa this past fall.

If the tribal representation remains limited to one person, then:

- At the least, all tribes with jurisdictions with the PFMC's jurisdiction should be able to present nominations for the seat;
- the PFMC may evaluate them and reduce the final number for a vote, but all tribes need to have an opportunity to comment on the nominees;
- Because so many tribes are represented by one person, a provision regarding conflict of interest should be developed and implemented.

The Quileute Tribe, however, believes that one tribal representative does *not* adequately reflect the existence of four sovereign tribal governments with fishing rights extending into Federal waters of the Washington Pacific Coast, or the existence of over 25 tribes in four states. Just as PFMC technical processes have evolved through the years to accommodate changing resource knowledge and the nature of fisheries, so should the structure of representation. Federal and state seats allow for rotation of individual representatives at the Council Table, based on expertise. Tribal representation might well parallel this procedure.

We suggest that PFMC create a process inclusive of the affected treaty tribes and our Federal trustees, to discuss a more equitable tribal representation in the PFMC forums (Council and Advisory Committees).

Regarding the topics of concern at the beginning, other than the tribal seat: Quileute has been following the Essential Fish Habitat process, to update the designated areas after five years and to evaluate the Requests for Proposals. We submitted a statement on that matter in November at the PFMC as well. It is important when making these decisions to have clarity on what factors create the EFH, what factors might "off-ramp" it. In addition, for each EFH created to protect an area, how might that delineation shift fishing pressures unduly to another area?

On another note, as Samuel Rauch of NMFPS has testified in March of 2013, central to the Council decisions are fishing jobs, the "lifeblood" of many coastal communities. To protect the jobs of our tribal members in our own coastal communities, we need to be able to fully engage. For that, we need to be assured that the Federal trustee will have the time and funds to fully engage with the treaty tribes:

- on EFH;
- on evaluation of the halibut stocks and distribution in Area 2A;
- on working with the International Pacific Halibut Commission;
- on the need to have data such as bycatch in a timely way to plan for our fisheries;
- on sustainability concerns for commercially important fisheries such as black cod and Dungeness Crab—helping us with monitoring programs;
- on climate change vulnerabilities; and
- for disaster relief when stocks crash.

It is important for the Federal trustee to recognize, in working with tribes on all of the issues covered by the Magnuson-Stevens Act, the PFMC, the North of Falcon process, and treaty negotiations in general, that each tribe is a sovereign government, and that consortia should only be consulted in their place if the tribe has delegated its position to the consortium, for that purpose.

Thank you for the opportunity to present these issues of concern.

Sincerely,

MEL MOON, JR.,
Director of Quileute Natural Resources,
 On behalf of the Quileute Tribe of La Push, Washington.

Senator BEGICH. Thank you very much.

Thank you for your testimony.

I will pass by my questions. I'll go to the members in attendance and start with those who, in the order of appearance, and I'll start with Senator Schatz and then Senator Cantwell. And I may forego my questions so we can get to the next panel because I know that two Senators have colleagues on there.

So, Senator Schatz.

Senator SCHATZ. Thank you, Chair Begich.

For Mr. Stelle, what's the status of the proposed amendment to the Bigeye Tuna Fishery Management Plan that would allow transfer of the quota from U.S. flight territories to Hawaii longliners?

Mr. STELLE. Thank you, Senator.

The status is that it's out for public comment. Public comment period closes end of the month. We are on schedule to make a secretarial determination on it by the end of March. If that is affirmative, then we are anticipating implementation by May of this year. So fundamentally, it's totally on our radar screen. We're tracking it.

Senator SCHATZ. Thank you very much.

Thank you, Chairman.

Senator BEGICH. Any additional questions?

OK, Senator Cantwell.

**STATEMENT OF HON. MARIA CANTWELL,
 U.S. SENATOR FROM WASHINGTON**

Senator CANTWELL. Thank you, Mr. Chairman.

And I do want to submit a statement for the record. And I want to thank you for holding this hearing and for your aggressive approach to going around the country in various regions to talk about these issues and being recently in the Pacific Northwest and focusing on a hearing as it related to our larger maritime industry. It is a worth \$30 billion in annual economic activity and supports 57,000 direct jobs. So, when we're talking about these issues for us, it's big business.

And, Mr. Stelle, I wanted to start with you. Thank you for bringing up where we are in the Pacific Northwest as far as management, sometimes my colleague and I, from Alaska, get a little bit of heat from the Northeast. They don't like our opinions about where they should be on management issues, but since we have a lot more fish it seems to be working.

So, one question, you know, are there still major fisheries being managed in the U.S. that need more data and better science? And are there any data-poor fisheries in the Pacific Northwest that could benefit from, you know, a major investment?

Mr. STELLE. Yes, on the first. And I think, as I alluded to earlier, the Western Pacific is Exhibit A on that point, on data-poor fisheries. It's a major impediment. On the Pacific Coast, data-poor stocks per se—

Don, what do you think? How would you answer that?

Dr. McISAAC. Yes. Thank you, Senator Cantwell.

There are some data-poor stocks on the West Coast. When they become a bottleneck species, it can be a problem. We have a pretty good relationship with the Science Center right now in coordinating how the science money is spent. But I'd be remiss if I did not say that additional money for science on groundfish studies would be beneficial.

Senator CANTWELL. Well, I should—yes.

I wanted to talk about REFI Bill and get your input on that. With the rising costs of participating in a West Coast groundfish forum, are fishermen able to pay down their loans and what should we be doing on that?

I mean, to me, Magnuson-Stevens is not about the big, broad changes, but the constant staying on top of the industry needs in driving further efficiencies. And those resources help us drive further efficiencies where everybody wins. And so, I certainly agree with your philosophy on that.

But anyway, on the groundfish fisheries, any thoughts from either of you on that point?

Mr. STELLE. First of all, on the weak stock issue, it's probably some of the bycatch stocks, where the data stock assessments is most difficult.

On the issue of buyback and some of the financial features of the groundfish fishery, the two principle challenges, I think, are refinancing or financing the buyback loans is one category. And the second is the scheduled reduction and phase-out of Federal support for observer coverage. And those are two real substantial, immediate challenges facing the industry from a financial perspective.

Senator CANTWELL. Mr. McIsaac, has the Council looked at this issue and do they have an opinion?

Mr. McISAAC. Yes.

The Council has looked at it. We have a letter on record in support of the buyback bill that is out there for consideration. And as Mr. Stelle indicated, the individual fishermen out there that are now coming to the dock and paying a portion of their landings for this buyback loan. Another portion for observer coverage and, of course, all those that are almost State landing taxes, is quite a burden.

So the Council does feel like moving forward with refinancing. A pretty old loan at a pretty high interest rate would be a good thing to do.

Senator CANTWELL. OK, and just quickly since I have about a minute left, hardly a subject for a minute, but how do the budget cuts, you know, as it relates to salmon affect our obligations as it relates to treaty rights?

Either, Mr. Moon or Mr. Stelle.

Mr. STELLE. Mel, go first please.

Mr. MOON. Well, certainly the work that we're doing on the coast, I think, is reaching a sustainability level. I know we've moved into management measures that have actually resulted in non-ESA situations on the coast. So those funds are well spent. We are, you know, dealing with some plentiful stocks. Of course,

there's a natural ebb and flow, but it would really be good to be able to maintain that level.

Mr. STELLE. I'd flag two topics generally, Senator. The first is science on survivals, productivity and survivals. And in particular, near shore marine, early life stage marine survivals, they're in the toilet and we don't know why. And so, we're creating a muffling productivity and that's a major——

Senator CANTWELL. Is that about acidification or——

Mr. STELLE. It could well be an indirect effect of changing acidification.

So the first is productivity in the science realm, productivity. And the second, as you well know, is habitat. If we continue with the long-term demographics as we see them, and if we don't change the way we manage our landscapes, we're going to be losing habitat and that continued loss of habitat is loss of productivity which is loss of those trust resources.

So those are, I would say, the two bigger challenges in salmon land. Salmon land management, per se, is quite sophisticated, quite stable and in pretty good shape. So it's a science issue and it's a habitat issue.

Senator CANTWELL. Thank you.

Thank you, Mr. Chairman. I know you want to get to the second panel as do I.

Senator BEGICH. No problem. Let me just clarify one thing. When you say habitat, upstream habitat, as well as——

Mr. STELLE. Yes, sir. Riverine and estuarine.

Senator BEGICH. Very good. Thank you very much. Makes me more confident in the decision I made last week.

[Laughter.]

Senator BEGICH. So thank you very much.

Senator CANTWELL. Mr. Chairman, let me just say that I know we're going to hear on the second panel, you know, about this issue. And certainly I, again, applaud you for, you know, working on this.

When we start talking about, you know, the same impacts that shellfish have had from acidification that the food source for salmon having the same challenges. But certainly thank you for your global approach to all of this.

Senator BEGICH. Thank you very much. Thank you very much.

And for me, and my questions, I'll submit for the record for you to respond to because I want to give to my two colleagues here as much time with the second panel as time will allow before the votes.

But again, thank you all very much for attending today. Good information. Good written testimony also.

Thank you.

If the next panel could come forward.

And again, we have votes at 11:15. The first vote will be 15 minutes and then three 10-minute votes after that. So we'll have, I think, the ability to do the panel and probably get to your questions. So I'll skip my questions again, too.

[Pause.]

Senator BEGICH. Thank you, again, to the next panel.

We appreciate your willingness to attend today and to participate and those that—any time we have folks from the West Coast, Hawaii, you have to travel a long distance, so we thank you for taking the time to be here. I had someone last night I was supposed to be at an event with, they haven't been able to get out of Juneau for 2 days because of fog and other weather conditions. So thank you for attending.

The first panelists we have, and I'll start from this side, left. And kind of my left, your right, I guess and move forward. Michael Goto, Auctioneer with the United Fishing Agency of Honolulu. So Michael, we'll start with—there we go. Well, I've actually gone right to left, now. OK. My list is that way. So, Michael, we'll start with you. And we'll go ahead and again we'll just go that way down the list.

Go ahead, please, Michael.

**STATEMENT OF MICHAEL GOTO, REPRESENTATIVE,
HAWAII-BASED LONGLINE FISHERY**

Mr. GOTO. Thank you, Mr. Chairman.

I apologize for running in late. Security mixed up my jacket at the metal detector so someone has my wallet in the building.

[Laughter.]

Mr. GOTO. So, I might have a hard time getting home now.

Senator BEGICH. Well, did you get a better jacket?

[Laughter.]

Mr. GOTO. No, I did not.

[Laughter.]

Mr. GOTO. Mr. Chairman, members of the Subcommittee, thank you for giving me the opportunity to speak at this hearing for the Reauthorization of Magnuson-Stevens Act. I would especially like to thank Senator Brian Schatz for his support and encouragement in having me at this hearing.

My name is Michael Goto and I am representing the Hawaii-based Longline Fishery. I'm a third generation operator of the Honolulu Fish Auction, the focus of the local seafood industry in the state. I serve on the Board of Directors of the Hawaii Longline Association, the main co-op of longline fishermen, as well as a council member on the Western Pacific Fishery Management Council. These positions have given me valuable insight into the realm of fisheries management, as well as impacts of working under the Magnuson-Stevens Act.

Members of the Committee, my main point to you is simple: the Hawaii-based longline fishery is the most important tuna longline fishery in the United States. There's also a globally iconic model of environmentally responsible longline fishing. This fishery is a standard of sustainability and optimal use of fishing harvest through science-based management and commercial value of its products.

This level of success has been achieved in part through the Magnuson-Stevens Act and the ten National Standards. Unfortunately, the MSA is not the only statute with which Hawaii Longline Fishery must comply. The application of other statutes, specifically the Endangered Species Act, the Marine Mammal Protection Act, and conservation measures from international tuna conventions, have

the potential to impede the survival and continuity of the fishery; especially through the misuse of those statutes by litigious advocacy organizations.

Additionally, the Hawaii fishery must also contend with market competition from foreign fisheries which may be practicing illegal, unreported and unregulated fishing, or IUU, whose adherence to sustainable fishery management is not nearly as regulated as those of any domestic fishery; especially the Hawaii longline fleet.

To give you a little background, the Hawaii-based Longline Fishery consists of a shallow-set swordfish fishery and a deep-set tuna fishery; the latter of which is the core of the industry. Due to Hawaii's geography, the fishery operates mainly in the Western and Central Pacific Ocean. The target of the deep-set fishery is the Pacific bigeye tuna which, in its raw form, yields the highly-coveted product known as "sashimi," one of the most highly sought food commodities in the world.

Now that you've heard a little bit about the fishery, I'd like to throw some numbers at you for the sake of perspective. In a 2012 NOAA study, the Hawaii longline fleet was only thirty-fourth in the Nation in landed seafood volume yet it was fifth in total landed value to the tune of \$100 million. This amount was only at the base level; before wholesale and retail markups; before considering restaurants and tourism; even air cargo carriers and freight. All told, this small fishery produces nearly half a billion dollars in domestic commerce.

From the same 2012 study, the total U.S. domestic landings of bigeye tuna were around 15 million pounds. The Hawaii longline fleet landed 14 million of this total, translating to about 93 percent of the take attributed to the Hawaii longline fleet. This relates the importance of bigeye catch to both the Hawaii fleet and the commercial value of which it produces.

"Domestic" is the key word here. Nearly 98 percent of Hawaii longline landings stay in the state or the Continental U.S., with just 2 percent heading to foreign markets. To reiterate, this is a domestic fleet providing domestic product to a domestic market.

Aside from the economic and national significance of the fishery, the underlying value is the great social and cultural importance to the state of Hawaii. The sashimi product has become a staple of local culture in Hawaii. It's the equivalent to crawfish in the Gulf; to salmon in Alaska; to lobster in New England; or to crab in Maryland. To be without this fundamental aspect of Hawaii culture is unthinkable.

Hawaii is also critically dependent on seafood not just as a cultural staple, but as a form of subsistence. Per capita, Hawaii residents annually consume about triple the amount of fish compared to the U.S. average making locally caught fish a key component of food security to the state of Hawaii.

In summary, the Hawaii longline fishery is a low-volume, high-value fishery. It contributes immensely to the economy and commerce to the state of Hawaii and the continental U.S. and sustains the culture and tradition of the state of Hawaii and contributes significantly to the food security of the islands.

Talking quickly about management importance, with the guidance of the Magnuson-Stevens Act and the ten National Standards,

Hawaii's fleet has pioneered exemplary fishery management, including the mitigation of protected species, the most important of which, and I see my time is about up, are reducing interactions to protected species and impacts on ecosystem and complying with international quota-based management for harvesting tuna.

Fast-forward to the end of my—ironically the fisheries supplying tuna into the U.S. market are not held to the same standards in the Hawaii fleet. And I am, of course, talking about imports. Illegal, unreported, and unregulated fishing methods are continuously taking advantage of unfair situations that the Hawaii longline fishery finds itself in. With increase in crew, transportation, enforcement costs, extreme fuel prices, the Hawaii fleet struggles to survive against these odds especially with this foreign product undercutting their market and driving them out of business.

Ultimately, current management measures in place are, in effect, giving opportunity for unregulated foreign product to flood the U.S. market, severely crippling the Hawaii fishery, and having immeasurable environmental impacts.

Thank you for the time.

[The prepared statement of Mr. Goto follows:]

PREPARED STATEMENT OF MICHAEL GOTO, REPRESENTATIVE,
HAWAII-BASED LONGLINE FISHERY

Mr. Chairman and members of the Committee, thank you for the opportunity to testify at this hearing for the reauthorization of the Magnuson-Stevens Act.

My name is Michael Goto and I am representing the Hawaii-based Longline Fishery. I am a third generation operator of the Honolulu Fish Auction: the focus of the local seafood industry in the state. I serve both on the Board of Directors of the Hawaii Longline Association, the main co-op of longline fishermen, and as a Council Member of the Western Pacific Fishery Management Council. These positions have given me valuable insight into the realm of fisheries management and the impacts of working under the Magnuson-Stevens Act.

Members of the Committee, my main point to you is simple: the Hawaii-based longline fishery is the most important tuna longline fishery in the United States. It is also a globally iconic model of environmentally responsible longline fishing. This fishery is a standard of sustainability and optimal use of fishing harvest through both science-based management and commercial value of its products.

This level of success has been achieved in part through the Magnuson-Stevens Act and its 10 National Standards. Unfortunately, the MSA is not the only statute with which the Hawaii Longline Fishery must comply, and the application of other statutes, and the misuse of those statutes by litigious advocacy organizations, has the potential to impede the survival and continuity of this fishery, especially the Endangered Species Act, Marine Mammal Protection Act, and conservation measures from international tuna conventions.

Background

I'd like to begin with some background of our industry. The origins of the Hawaii-based longline fishery can be traced back to the turn of the 20th century. In 1917, Japanese immigrants to the Hawaiian Islands introduced their style of "flag" fishing on wooden sampans. These humble origins expanded rapidly. By 1991, the fleet had grown to over 140 vessels, many of which transferred in from all coasts of the U.S. mainland. This transition began the evolution to our current version of longlining, now using steel-hulled vessels and sophisticated electronic technologies.

The Hawaii-based longline fisheries currently consist of a shallow-set swordfish fishery and a deep-set tuna fishery, the latter of which is the core of the industry. Due to Hawaii's geography, the fishery operates mainly in the Western and Central Pacific Ocean. The target in the deep-set fishery is the Pacific bigeye tuna which, in its raw form, yields the highly coveted product known as "sashimi," one of the most sought after food commodities in the world.

The fishery intersects with the commercial market at Pier 38 in Honolulu Harbor. Here, the company known as United Fishing Agency operates the Honolulu Fish Auction on a daily basis. Based on the famous Tsukiji Fish Market in Tokyo, thou-

sands of pounds of fresh pelagic product are displayed and sold daily. Dozens of seafood dealers convene into the sub-40 degree floor at 5:30 am to bid on individual pelagic fish landed by longline vessels. Quality is paramount in this raw-product market, driving fishermen to handle all catch with extreme diligence. The longline style of fishing and post-harvest care, coupled with the auction style of sale, produces a fierce competitive atmosphere and maintains a profitable fishery for all parties involved.

Commercial Value/Domestic & Cultural Significance

Now that you've heard about the fishery and market, I'd like to throw some numbers at you for the sake of perspective:

- In a 2012 NOAA study, the Hawaii Longline Fleet was only 34th in the Nation in landed seafood volume (27 million lbs), yet was 5th in total landed value to the tune of over \$100 million. This amount was only at the base level, before wholesale and retail markups, before considering restaurants and tourism, even air cargo carriers and freight. All told, this "small" fishery produces nearly half a billion dollars in domestic commerce.
- From the same 2012 study, the total U.S. domestic landings of bigeye tuna were around 15 million pounds. The Hawaii longline fleet landed 14 million of this total. This translates into 93 percent of the take attributed to the Hawaii fleet. This relates the importance of bigeye catch to both the fleet and the commercial value of which it produces.

"Domestic" is the key word here. Nearly 98 percent of Hawaii longline landings stay in the state and Continental US, with just 2 percent heading to foreign markets, mainly Japan. To reiterate, this is a domestic fleet providing domestic product to a domestic market.

Aside from the economic and national significance of the fishery, the underlying value is the great social and cultural importance to the State of Hawaii. The sashimi product has become a staple of local culture in Hawaii. It is the equivalent crawfish in the Gulf, salmon in Alaska, lobster in New England, or crab in Maryland. To be without this fundamental aspect of Hawaii's culture is unthinkable.

Hawaii is also critically dependent on seafood, not just as a cultural staple, but as a form of subsistence. Per capita, Hawaii residents annually consume almost triple the amount of fish compared to U.S. average, making locally caught fish a key component of food security for the State of Hawaii.

Additionally, ocean pelagic fish is the single highest value crop in the State, greater even than sugarcane, papaya, and coffee.

In summary, the Hawaii Longline Fishery:

- Is a low volume, high value fishery.
- Contributes significantly to the economy and commerce of the State of Hawaii and continental United States.
- Sustains the culture and tradition of the State of Hawaii and contributes significantly to the food security of the Islands.

Management Importance/Impact

With the guidance of the Magnuson-Stevens Act and the 10 National Standards, the Hawaii Longline Fleet has pioneered exemplary fishery management, including the mitigation of protected species interaction to having one of the most comprehensive observer programs in the world.

Sustainability is a crucial goal for fisheries worldwide. The two biggest adjustments the Hawaii Longline Fleet has made are:

- (1) Reducing interactions with protected species and impacts on the ecosystem.
- (2) Complying with international quota-based management for harvesting tuna.

Regarding the first point:

- Hawaii fleet works directly with fisheries scientists and managers to reduce impacts on the ecosystem and protected species, including NMFS PIRO, PIFSC, Coast Guard, and the WesPac Council. Federal observers are placed onboard selected vessels to ensure compliance and all landings and interactions are rigorously documented.
- In 2001, measures were taken to reduce seabird interaction using methods such as side-setting, dying bait, and setting at night. Bycatch rate was reduced by 96 percent.
- In 2004 and 2008, measures were taken to reduce Loggerhead and Leatherback turtle interaction through changes in hooks, type of bait, and the implementa-

tion of a hard cap which would close the fishery if reached. No other longline fleet in the Pacific operates under a hard cap to protect sea turtles.

Other Precautionary Conservation Measures include:

- 1991—First limited entry pelagic fishery in US, capped at 164 longline permits.
- 1991—First pelagic fishery in U.S. to require daily logbook reporting.
- 1991—Longline Exclusion Zones set up around Hawaii.
- 1993—Fishery observers placed on vessels to monitor protected species interactions.
- 1994—First U.S. fishery to require vessel tracking using satellite technology (as a result of fishery area closures).
- 2000—Prohibited shark-finning.
- 2004—Became the only Pacific fishery with a hard limit on sea turtle interactions.
- 2004—Established the most extensive government fishery observer program of any Pacific longline fishery (100 percent swordfish/over 20 percent tuna).
- Currently, there is a Take Reduction Team in place mitigating the interactions with False Killer Whales. However, these measures aim to shut down large areas of the longline fishing grounds with just a few interactions. A consequence of the MMPA and ESA, the Magnuson-Stevens Act is being oriented toward reducing fishing effort, not just the interactions they are trying to prevent.

Secondly, Hawaii's tuna fishery is part of an international tuna convention overseen by a management commission (WCPFC) which allocates quota to the participating states and territories. The Hawaii Longline bigeye quota is currently 3763 metric tons. This quota translates to only 3 percent of the total Western and Central Pacific bigeye catch, and is a reduction of the average historic catch of the Hawaii Longline Fleet.

In addition:

- The fishery operates many thousands of miles to the northwest of the equatorial Pacific, where 90 percent of the bigeye mortality occurs.
- As a consequence of the strict compliance with the tuna convention measures, the Hawaii Longline Fishery was the only fishery, foreign or domestic, to ever close on reaching its allotted bigeye catch limit.

Despite this, further reductions are on the horizon for the years 2015 and 2017. The net result of this loss is not just economic value, but of the threat of predatory market incursion. Foreign fisheries annually try to invade the Hawaii tuna market by offering to supplement the lack of domestic supply should the fishery close.

Ironically, the fisheries supplying this tuna are not held to the same requirements as the Hawaii fleet in terms of conservation and management standards, both to the tuna stock and protected species. In short, the current measures in place are, in effect, giving opportunity for unregulated foreign product to flood the U.S. market, severely damaging the Hawaii Longline Fishery.

Within the scope of the international commission's activities, the Hawaii Longline Fishery has unfortunately become a pawn in much larger game. "Allocation" over "conservation" has become the true nature of the convention, resulting in the further suffering of the fishery.

Mr. Chairman, members of the Committee, I hope my summarization of the Hawaii Longline industry has shed some light on the values and successes of the fishery, as well as the plights it currently faces.

Similar to most domestic fisheries, the Hawaii Fleet is at a great disadvantage to foreign fishery efforts, with both international bigeye quota management and predatory market practices. In addition, our own management system seeks to further restrict fishing effort through statutes which supersede the true intentions of the Magnuson-Stevens Act.

The reauthorization of Magnuson-Stevens Act is an essential component of sustaining this unique, model fishery. Maintaining this inequitable course would mean the eventual demise of the Hawaii Longline fishery. Therefore, it is imperative that considerations be made to assist this fishery through:

- Not allowing the Magnuson-Stevens Act continue to play a subsidiary role in fishery management through the primacy of other Federal statutes which contradict or are inconsistent with the requirements and policies of MSA.
- The United States supporting the Hawaii Longline Fishery in the international fishing management arena, and not making any further concessions such as ad-

ditional bigeye catch limit reductions. As a model fishery, it is contradictory to continue to restrict and relegate this industry.

- Developing funding programs to promote public awareness of American seafood products. By making the distinction from foreign products and fishing practices, the Magnuson-Stevens Act will be both protecting domestic markets and promoting sustainable, responsible fishery management.

ATTACHMENT 1

WRITTEN STATEMENT OF THE HAWAII LONGLINE ASSOCIATION

The Hawaii Longline Association (“HLA”) very much appreciates this opportunity to provide comments regarding our perspectives on, and specific suggested improvements to, the Magnuson-Stevens Fisheries Conservation and Management Act (the “Magnuson Act” or the “Act”). The application of Federal law to fisheries conservation and management issues in Hawaii is a critically important topic that has direct relevance to the health, productivity, and sustainability of Hawaii’s fisheries. In this light, we offer the following points regarding the background and management of Hawaii’s commercial longline fisheries, as well as the ways in which the Magnuson Act can and should be amended to improve the management and future sustainability of our fisheries. Thank you for your consideration of these points.

Background and Management of the Hawaii Longline Fisheries

HLA is a nonprofit organization formed to represent and advance the interests of individuals and entities involved in the Hawaii-based commercial longline fisheries, and to promote participation by industry in fishery conservation and management decisions and processes. The Hawaii-based commercial longline fisheries consist of a shallow-set fishery and a deep-set fishery. These two fisheries are managed as separate fisheries under the Magnuson Act and other applicable Federal laws.

The target species of the Hawaii longline fisheries—swordfish (shallow-set) and bigeye tuna (deep-set)—are highly migratory species subject to extensive management under the Western and Central Pacific Fisheries Convention for the western and central Pacific Ocean, and by the Antigua Convention for the eastern Pacific Ocean. Both conventions are international fisheries agreements that seek to ensure, through effective management, the long-term conservation and sustainable use of highly migratory fish stocks throughout the Pacific Ocean. To accomplish this goal, the Conventions establish regional fishery management organizations (“RFMOs”). As a Contracting Party to both Conventions and as a Member of the two RFMOs, the United States implements the decisions of the RFMOs through implementing statutes applicable to the Conventions.

The Hawaii longline deep-set fishery is subject to strict annual bigeye tuna quotas pursuant to the authorities established in the implementing statutes for the Conventions. From 2009 to 2013, the applicable annual bigeye tuna quota in the central and western Pacific was 3,763 mt. The current quota will remain in place in 2014; however, the quota will be decreased to 3554 mt for the years 2015 and 2016. In addition, over the past few years, a quota of 500 mt per year has been set for U.S. longline vessels larger than 24 meters operating in the eastern Pacific Ocean. Application of these quotas has negatively impacted the deep-set fishery, causing an early closure of the deep-set fishery in the western and central Pacific Convention Area in 2009 and 2010. Moreover, the deep-set fishery’s bigeye tuna quotas represent a very small portion of the overall international bigeye catch, and the limited-entry deep-set fishery is not the source of bigeye catch growth that has resulted in overfishing on an international scale.

Swordfish stocks in the North Pacific Ocean (targeted by the shallow-set fishery) are also included within the scope of the Conventions, and are healthy and are not subject to overfishing or approaching an overfished condition. Indeed, the shallow-set fishery’s annual swordfish landings regularly fall far below sustainable catch levels. The shallow-set fishery is also subject to annual closures if incidental takes of endangered leatherback or loggerhead sea turtles reach certain levels.

Both the deep-set fishery and the shallow-set fishery are conservatively managed, neither is responsible for the overfishing of any highly migratory fish stocks, and all fish landed in both fisheries are rigorously documented. Moreover, both fisheries are subject to stringent requirements under Federal environmental laws such as the Endangered Species Act (the “ESA”) and the Marine Mammal Protection Act (the “MMPA”). For many years, the Hawaii-based longline fisheries have been reliably observed, with 100 percent coverage of the shallow-set fishery and 20–25 percent coverage of the deep-set fishery. Collectively, these fisheries are among the most rig-

ously regulated, monitored, observed, and reported commercial fisheries in the world.

The participants in the Hawaii longline fisheries recognize that there is a direct relationship between a healthy ocean ecosystem, predictable regulatory programs, and sustainable commercial fisheries. In the past decade, the Hawaii-based longline fisheries have demonstrated that they are able to adapt, innovate, dramatically reduce bycatch impacts, conserve species, manage regulatory obligations, defend against constant advocacy litigation, and still succeed in highly competitive fisheries dominated by large industrial high seas Asian fleets that are largely unmonitored and unregulated. In this context, HLA believes that Federal law should be designed and applied to further encourage the future economic, conservation, and environmental success of the Hawaii-based commercial longline fisheries.

Magnuson Act Amendments—Suggestions for Improvement

First, because the fish stocks targeted by the Hawaii-based commercial longline fisheries are subject to management under one or more international agreements, they fall within the Magnuson Act’s “International Exception.” This exception is well-conceived and makes practical sense because additional regulation of these fisheries under certain provisions of the Magnuson Act—particularly those related to overfishing and annual catch limits—would be duplicative of the manner in which these fisheries are already stringently regulated pursuant to international agreements. Such duplication would be extraordinarily unfair to U.S. fisheries by placing them in a significantly less competitive position with respect to foreign fleets that are subject to no such duplication. The International Exception can, and should, however, be more directly and clearly stated in the Magnuson Act. In this light, we recommend that the following Magnuson Act provisions related to overfishing and annual catch limits be amended as follows:

- Section 303 of the Act should be amended to clarify and confirm that subsections (a)(1)(A), (a)(10), and (a)(15) of Section 303 do *not* apply to fisheries that are managed under an international agreement in which the United States participates.
- Section 304(e) of the Act should be amended to clarify and confirm that Section 304(e) does *not* apply to fisheries managed under an international agreement in which the United States participates.

These recommendations are clarifying amendments to the Magnuson Act (as opposed to new substantive statutory terms), and would serve to significantly facilitate the clear application of the Act and to eliminate the potential for future litigation.

Second, we also recommend that the Magnuson Act’s confidentiality provisions be amended to clarify and confirm that the vessel owner has full access to *all* information generated aboard the vessel, including all information collected and generated by observers (except for the observer’s personal journals or other personal information). All information and data relating to protected species interactions or observations must be fully available to the owner of the vessel on which the information was collected.

Third, all U.S. fisheries are subject to the ESA and the MMPA. Often, the implementation of these Federal acts contradicts, or is inconsistent with, the policies and requirements of the Magnuson Act. We believe the Magnuson Act can and should be amended in some minor, but important, ways to facilitate more consistency among all of these Federal statutes, and to thereby create more fairness and predictability for U.S. fisheries. These suggestions are as follows:

- The Magnuson Act should be amended to clarify and confirm that, for any Federal action taken pursuant to the Magnuson Act (such as approval of a fishery management plan or amendment, or the issuance of implementing regulations) that triggers the consultation requirement of ESA Section 7, the applicable Council and any fishing association representing the vessels and individuals affected by the Federal action are “applicants” for purposes of implementing ESA Section 7.
- The Magnuson Act should be amended to state that any restriction on the management of fishery resources that is necessary to implement the ESA or the MMPA must be implemented under the authority of the Magnuson Act and in compliance with the applicable procedures and requirements of the Magnuson Act.

HLA appreciates your consideration of these suggestions and looks forward to the opportunity to continue to participate in the Magnuson Act reauthorization process as it moves forward.

ATTACHMENT 2

HAWAII SEAFOOD INDUSTRY TALKING POINT

Problem: America's seafood supply is increasingly dominated by imported seafood from countries with questionable fishery management, fishing practices and seafood safety controls. According to NOAA, in 2012, only 6 percent of the total U.S. seafood supply was produced by American fisheries. Our federally-managed fisheries produce sustainable and safe domestic seafood, but face stiff competition from imported seafood in the market. American fishing communities need support in the U.S. market.

Hawaii Situation: Hawaii has a significant domestic fishing industry supplying primarily a local and domestic market. Our pelagic longline fishing fleet is one of the most intensively studied, monitored and managed in the world. As such, we have a model for responsible fishing and sustainable seafood production for the rest of the world to emulate. Our U.S. science-based management system under NOAA and the Western Pacific Regional Fishery Management Council is what ensures the sustainability of Hawaii's fisheries and fishing communities. As an island state, Hawaii fisheries and seafood are essential to our economy, quality of life and public health.

Solution: Restore full funding of the Saltonstall-Kennedy Fisheries Research Program to help American fishing communities become more competitive in the American market through outreach, education, promotion and research.

Shared Benefits: Strengthening Hawaii and other American fisheries and fishing communities helps with jobs and offsetting the growing U.S. trade deficit in seafood. Efforts made possible through a fully funded Saltonstall-Kennedy Fisheries Research Program will: (1) enhance the recognition of America's sustainable fisheries, (2) help to elevate the public recognition of the value-added to American seafood products that stems from NOAA fisheries management and (3) demonstrate to other countries that the American market recognizes the need for responsible fishing and sustainable and safe seafood.

Senator BEGICH. Thank you very much for your testimony.

Next, I have Mike Gravitz, Policy and Legislative Director, Marine Conservation Institute.

Thanks very much for being here, Mike.

**STATEMENT OF MICHAEL GRAVITZ, DIRECTOR OF POLICY
AND LEGISLATION, MARINE CONSERVATION INSTITUTE**

Mr. GRAVITZ. Thank you, Senators. And thank you Senator Schatz for inviting us here. On behalf of the Marine Conservation Institute, I appreciate the opportunity to provide testimony on Magnuson-Stevens Act and needed improvements.

As Sylvia Earle, one of this country's most distinguished ocean explorers said so trenchantly, "Where there is no water, there is no life; where there is no blue, there is no green." So, just as blue places are required for the survival of green places, good habitats, something other people have mentioned, is the foundation for healthy oceans and fisheries.

While there are many threats to the ocean, there is one overarching imperative. Scientists agree that protecting whole ecosystems rather than species one-by-one is the best, most cost effective and quickest way to maintain the ocean's biological diversity, its abundance and resilience in the face of climate change.

To accelerate ocean recovery in the U.S. and abroad, the Marine Conservation Institute recently initiated the Global Ocean Refuge System, or GLORES. GLORES is designed to catalyze strong protection for at least 20 percent of the ecosystems in each marine area by 2030. Enough, we hope, to avert mass extinction that could come as the oceans warm and acidify.

Turning to the Magnuson-Stevens, based on the last seven years of history, we believe that MSA is working well and needs only modest changes like—

Senator BEGICH. Mike, can I have you pause for one second? There's some background sound coming from somewhere. You can hear it now.

I just want to make—because as you talk it keeps interrupting, but I'll let the tech people figure it out. Go ahead.

Mr. GRAVITZ. Thank you.

Like a 7-year-old car needs a tune-up and some touchup paint; it does not need to be swapped for a new one. Its major parts are fine.

Every hunter and nature lover knows that degraded habitats don't produce healthy wildlife populations on land. Why would we think it works any differently in the ocean? To address this current law and regulations, require the councils to evaluate new information about ocean habitat every 5 years and assess whether important places are being adequately protected.

The program has designated hundreds of millions of acres of ocean as Essential Fish Habitat, or EFH, but only a very tiny portion of this has received actual protection from damaging activities. Any application of the EFH principles and processes has been uneven among councils.

The habitat protection program, we believe, can be greatly improved with a few straightforward fixes. Refocus habitat protection on smaller, more important places—those are called “habitat areas of particular concern”—and require these places to have specific management measures to protect them and specific objectives to measure success. Use a precautionary approach on habitat and explicitly allow predictive models as the best available science to establish these important places until visual inspection of an area allows better decisionmaking. Require regional councils to protect identified concentrations of deep-sea corals with HAPC designation and management measures that prohibit bottom contact fishing. Mandate the 20 percent of each type of representative habitat in a region to be protected from destructive fishing methods.

Protecting marine habitat and life with laws and regulation is certainly a good first step, but laws don't enforce themselves. Adequate international enforcement against illegal, unregulated and unreported fishing known as pirate fishing, matters a great deal to U.S. fishermen and fishing communities. Based on reasonable assumptions we believe that the U.S. may be importing from \$1.2 to \$2.9 billion of illegal catch a year, representing about 20 percent of the U.S. imports. If the seafood was replaced with domestic product, the U.S. fishing industry might be able to reclaim as many as 28,000 jobs in coastal areas. State-by-state breakdowns of this total impact are available.

Clearly, we need some other tools for faster and more effective enforcement than the current biannual international blacklist system for IU fishermen and nations. Even though our government personnel work hard every day, the process is not working well enough. Our cops simply need better tools to use.

I want to also mention the importance of NOAA's protected resources program that rebuilds populations of marine mammals and

other endangered species on the Pacific Coast and around Hawaii. We work in Hawaii to build support among fishermen and local communities for the protection of the Hawaiian monk seal, one of the few rare seals on earth. We started this program because NOAA seemed to lack the capability to effectively reach out to local fishermen and communities to explain its programs and build understanding. NOAA's ability to communicate with affected local communities about fisheries and protected species needs to improve and we believe it can improve.

Thank you very much for your time and attention.
[The prepared statement of Mr. Gravitz follows:]

PREPARED STATEMENT OF MICHAEL GRAVITZ, DIRECTOR OF POLICY AND LEGISLATION,
MARINE CONSERVATION INSTITUTE

“NO WATER; NO LIFE AND NO BLUE; NO GREEN”

—Sylvia Earle, Board member, Marine Conservation Institute

Introduction

On behalf of Marine Conservation Institute, I appreciate the opportunity to provide testimony on aspects of the Magnuson-Stevens Fishery Conservation and Management Act (MSA or Magnuson-Stevens) in the Pacific and Western Pacific and highlight improvements that would make the law even more effective than it has been since its last reauthorization in 2007.

Since 1996, Marine Conservation Institute has defined and shaped the science and practice of marine biodiversity conservation, a field that examines man's impacts on our oceans —for good and for bad. As Sylvia Earle has noted so crisply —“No water; No Life and No Blue; No Green”. Healthy oceans are essential to human survival and prosperity, but they are in deep trouble worldwide. There are many threats to ocean health: ocean warming, ocean acidification, ocean and coastal habitat destruction, too many nutrients, as well as the over fishing, pirate fishing, and the scourge of destructive fishing that Marine Conservation Institute focuses on. Unfortunately, the list goes on and on.

While each threat has its own set of potential solutions, there are some unifying themes and ONE overarching imperative for protecting marine life. Most marine scientists agree that protecting marine life in their ecosystems is the best way to maintain the oceans' biological diversity, abundance and resilience. Rather than protecting species one by one, protecting whole ecosystems is the most cost-effective and quickest way to help keep our oceans healthy.

Understanding the importance of protecting key places in the ocean led us to help persuade President George W. Bush to strongly protect three very large places in the tropical Pacific: Papahānaumokuākea in the Northwestern Hawaiian Islands in 2006; and the Pacific Remote Islands and Rose Atoll marine national monuments in 2009. These successes set off a worldwide movement to protect much larger areas of the sea.

To accelerate efforts to recover the diversity and abundance of marine life, Marine Conservation Institute recently initiated the Global Ocean Refuge System (GLORES, pronounced glôr-ees), a strategic, science-based approach to safeguard marine ecosystems on a global scale. GLORES is designed to catalyze strong protection for at least 20 percent of the ecosystems in each marine biogeographic region by 2030, enough to avert mass extinction that could come as the oceans warm and acidify.

As Marine Conservation Institute's Director of Policy and Legislation, I oversee our congressional and Executive Branch advocacy on protecting ocean habitat especially in the Pacific. This work includes protecting deep sea corals from destructive fishing, reducing illegal, unregulated and unreported (also known as pirate fishing), financing marine conservation programs, stemming the flow of marine debris, and restoring healthy populations of the Hawaiian monk seal. Before joining Marine Conservation Institute, I was the Ocean Lobbyist for Environment America for five years, where I advocated for passage of the revised MSA in 2005–2006, worked on implementing regulations for annual catch limits after the bill was signed into law, and advocated for improvements to the National Marine Sanctuary Act.

Summary Assessment of Progress under MSA

Based on the experience of the last seven years, we believe that Magnuson-Stevens fundamentally is working well and needs only small changes to serve our conservation needs. Likening it to a seven-year-old car, MSA needs a tune-up and some touch up paint here and there. It does not need to be swapped for a new car, and it does not need to have any major systems taken out and replaced with something “better”.

For the most part, the flexibility that some desire to add to the law today was what prevented the pre-2007 versions of the law from producing sustainable fisheries and protected habitats. In the real world on the regional fishery management councils, it often turned out that flexibility was an excuse for inaction, half measures, or ignoring scientific advice. We should not go back to that era of timid and ineffectual fishery and habitat management.

The 2007 revisions have driven a sea of change in the behavior of regional fishery management councils, fishermen, and NOAA by: (1) setting firm annual catch limits and accountability measures based on the best, unbiased science available; (2) beginning to recognize the importance of habitat for healthy oceans and fish populations; (3) taking bycatch reduction seriously; and (4) improving domestic and international enforcement of fishery laws.

When Magnuson-Stevens was reauthorized in early 2007, the Pacific and Western Pacific regions had 12 fish populations that were overfished or experiencing overfishing. Today, that number has dropped to 10 fish populations. While the numerical progress seems relatively modest in those intervening years, most of these troubled fish populations were deeply depleted and are very slow growing, and therefore slow to recover (*e.g.*, rockfishes off the west coast); or they are highly migratory species like bluefin or bigeye tunas that are fished by the US, and more significantly international fleets, outside U.S. waters under the control of international fishery management organizations that are struggling to become more effective.

One way of assessing the overall progress of Magnuson-Stevens is to look across all regions of the U.S. and all the fisheries for which we have adequate status information. There are 230 fish populations that can be tracked closely enough across the time period from 2007 to now. While this index of progress, called the Fish Stock Sustainability, is imperfect, it was at 506 out of a perfect 920 at the end of 2006 and it was 616 at the end of 2012. Clearly there is more work to be done, but the trend line *is* in the right direction.

Another way to assess progress under MSA is to look at the number and type of fish populations rebuilt to sustainable levels under the new management framework. Thirty-four stocks have been rebuilt as of the third quarter of 2013. Some of the better known populations include: some crab species in Alaska, various salmon populations on the west coast, red grouper in the Gulf of Mexico, black sea bass off the south Atlantic, summer flounder off mid-Atlantic, and flounder, haddock and pollock in New England. Unfortunately, many rebuilt stocks are still at low levels compared to historic sizes.

Lest we be too self-congratulatory about progress, it is useful to remember that as of the third quarter of 2013, there were still 40 overfished populations and 26 populations being fished above replacement rate, for a total of 66 fish populations in trouble out of the 230 or so for which NOAA has sufficient information for evaluation. That is nearly 30 percent of the fish populations that NOAA has enough information to assess.

While progress on establishing sustainable fish populations is important, this is hardly the only or even the most important measure of progress under Magnuson-Stevens. Healthier oceans are not just made up of sustainably fished populations of commercial species. Healthier oceans require less bycatch of non-target species, larger populations of forage fish at the bottom of the food web, less habitat damaged by destructive fishing methods like bottom trawling, and protection of vulnerable marine mammals and other marine wildlife like sea birds and sea turtles from being killed by fishing. On this count, there has been progress but less than we would hope.

One crucial improvement in MSA fishery management that would make for healthier oceans is to remember that oceans are not a collection of single species to be managed separate and apart from each other. No ecosystem works that way. Instead the ocean must be managed as the dynamic and interconnected ecosystem that it is. Management must be based on the entire ecosystem and its participants. Some fish require protected habitat to reproduce; all species need special places where the eggs and larvae grow into juveniles; fish require abundant prey to grow well, even if that prey is something humans would like to catch and eat too.

When the 2007 version of Magnuson-Stevens is reauthorized, we want Congress to recognize these principles of marine ecosystems and adopt an Ecosystem Based

Management approach that recognizes the need to consider the interactions among populations and between populations and their habitat.

Habitat Protection is Key to Healthy Oceans: Essential Fish Habitat

You might ask what habitat protection has to do with sustainable fish populations or healthy oceans, and the answer is simple. Hunters and nature lovers on land know that you can't have healthy, diverse populations of animals in places that have been abused, clear cut, or burnt over; and marine scientists have shown that degraded ocean habitats like seagrass beds that are dying from sedimentation or too many nutrients, ocean bottoms that have been plowed by bottom trawls, or coral gardens that have been cut down by heavy nets, does not support abundant, diverse marine life. Like on land, many fish and invertebrates need complex structures in which to live and grow. Rocks, rubble, and reefs filled with marine plants, sea fans, gorgonians, and anemones provide protection from predators, sources of food, shelter from currents, and places to reproduce.

Therefore, it is critical that Magnuson-Stevens be used to protect these kinds of places from destructive activities of all types, not just fishing related damage. The first attempt to do this was made in the 1996 amendments to MSA when Essential Fish Habitat (EFH) was first defined. For the next ten years the regional councils did not do much with MSA's habitat requirements, so the 2007 amendments created a somewhat better framework for marine habitat protection. Better, but it is still not up to the task of consistently protecting critical habitats for fish and other marine life across different regional councils and across different types of marine habitat.

Current law requires the regional councils to collect new information about EFH every five years and assess whether existing fishery management plans are adequately protecting those places. Councils are not required to take action to designate any EFH. In addition, there is no clear set of standards for deciding where and when to apply management measures for designated EFH areas; EFH can be designated with no management actions for that area. Finally, there no requirements for management objectives to be set for EFH when it is established. When councils protect EFH they can do so with spatial and temporal closures, restrictions on the type of fishing gear that can be used in an area, and other means. However, most EFH is accompanied by no special protection. The application of EFH by the councils has also been uneven.

For example, the Western Pacific Council prohibited bottom trawling and other bottom contact gear such as long lines in their entire region a long time ago to protect reefs and other habitat. The South Atlantic Council has established many bottom fishing closures for endangered species of fish including Warsaw grouper and Speckled hind, as well as corals in places like the Oculina Banks. The council is now reviewing whether the closures are working or need to be re-located to be more effective. This council seems to understand the utility of EFH and is willing to dynamically manage those areas.

The Pacific Council has established some EFH. In 2002, it designated extensive Rockfish Conservation Areas to rebuild populations of this group of species, but only after the populations had been overfished to extremely low levels. The council also has set aside large areas of ocean beyond depths where bottom trawling can be done today. Though much of that area will probably never be fishable, it is another step which will prevent fishing in places before we know much about their sensitivity. But there are many more steps that can, and should be taken.

Part of the problem with the EFH program is that the definition of EFH is very broad. While that allows councils to deal with fishing and nonfishing impacts on marine life, when too much of the ocean gets designated as EFH, there is loss of focus on more important, but smaller areas that might make a bigger difference in ocean health. We recommend that, rather than doing away with EFH, the law be modified to focus councils on fish or other marine populations that are not recovering under MSA and tight annual catch limits because these species' recovery is constrained by damaged habitat. This will focus the councils on habitat issues that could make a difference for healthier oceans.

The program does have a category of ocean area called Habitat Areas of Particular Concern (HAPC), but it is only a regulatory, not statutory distinction. It would be useful to put the HAPC definition and process into Magnuson-Stevens and require that HAPC areas be accompanied by mandatory management measures that protect these habitats.

The ocean is vast and assessing what is on the bottom is an expensive, time consuming process. Unlike on land, much of what is on the ocean's bottom is unknown other than its depth and contours. It would be as if all we knew about Yellowstone National Park was its topography; and very little about the trees, plants, or animals

that lived in the park was known. An example of how little we know about bottom habitat even in places close to our shores is a research trip two years ago co-led by one of Marine Conservation Institute's scientists to the submarine canyons off the Mid-Atlantic coast. Only 100 miles off the mouth of the Chesapeake Bay, Dr. Sandra Brooke and a team sponsored by NOAA discovered whole new underwater worlds on the bottom and sides of the canyons.

In order to overcome lack of visual evidence of important habitats, scientists have developed techniques to predict where important bottom living marine life should exist based on the physical characteristics associated with known habitat of different species. For many areas of ocean, these models are the 'best available science' on the question of what habitat lies beneath the waves. Called Predictive Habitat Modeling, the technique can be used to predict where important species like deep sea corals should be, and armed with these maps, scientists can then narrow their search for important habitats worth protecting. Unfortunately, many councils are unwilling to use these habitat models to establish EFH in the absence of visual evidence gathered by manned or unmanned submersibles, for which there is little funding.

One improvement to MSA would be to require councils to use these models when available to at least protect areas until they can be visually assessed so that they are not damaged in the meantime. Areas with a high likelihood of important habitat would then be protected until scientists could see what was there. Remember that today NOAA has reduced funding and assets available for field exploration to assess habitat compared to just a few years ago. To address this problem, we recommend a three step process: (1) use peer-reviewed Predictive Habitat Models to identify high probability coral habitats; (2) protect areas where justified by the models; and (3) verify model results with submersibles or remotely operated vehicles. We believe this is a sensible precautionary approach designed to deal with the expense and challenges of marine exploration.

Another potential improvement to the EFH program would be a requirement that the councils set aside some percentage—say 20 percent—of each type of underwater habitat (representative areas) with prohibitions on any kind of bottom contact gear like bottom trawling or bottom long lines as a way of encouraging proactive preservation. The requirement could be phased in over a period of time, for example, five years, to allow time for the councils to develop a thoughtful process based on best available science.

Two other gaps in NOAA's habitat protection program are evident. The scientific basis for how much existing habitat contributes to the recovery of damaged populations and whether the existing program is really achieving its stated objectives both need additional research. The importance of habitat protection is undeniable, and, frankly common sense, but additional research would allow the program to more carefully tailor set-aside areas for critical stages of marine life. Second, there is no one source of US-wide information on the program available to the public or Congress. We suggest a short, periodic report to Congress to tell the program's story and build support for its achievements.

Recommendations:

- Require regional councils to use clearer criteria for picking EFH and establishing management measures for them.
- EFH and HAPC should be accompanied by explicit management objectives to enable periodic assessment of effectiveness and change in management, if needed.
- Put a Habitat Areas of Particular Concern (HAPC) definition into MSA to help narrow the focus on habitat that really makes a critical difference for improving ocean health.
- Require that some management measures must accompany HAPC designation,
- Using a precautionary approach, explicitly allow use of predictive models as the 'best available science' to establish EFH until visual inspection of an area allows better decisionmaking.
- Mandate that 20 percent of each type of representative habitat in a region be protected from destructive fishing methods.

Habitat Protection: Deep Sea Corals Are the New Frontier

Deep sea corals are corals that live on the food that floats down to them from above; they are too deep to use light and photosynthetic algae like their shallow water cousins. Deep sea corals often live in extensive colonies and individual corals can be hundreds or even thousands of years old. They are very fragile and easy to destroy with bottom trawl nets, traps, long lines, etc. It is for that reason that the

Senate added a program to Magnuson-Stevens at the behest of the late Senator Frank Lautenberg to identify areas where these corals existed and begin to protect them from damaging activities.

Now that we know much more about the typical members of these deep sea communities from the program's research, it would be good to enlarge the definition of these deep sea communities to include other marine life like sponges that grow at great depths and mesophotic corals that grow at depths beyond scuba access but not quite as far down as deep sea corals.

The Deep Sea Coral Research and Technology Program typically spends three years conducting research in each region to determine the extent and location of the corals. Three years of research just wrapped up in the Pacific region and the Pacific Council is now considering findings from the program. Marine Conservation Institute and others have engaged with the council providing reams of information on vital habitat that is not now protected. We will be watching to see if the council acts on some of the new information. The NOAA deep sea coral research program will start in the Western Pacific region in 2015 where approximately \$2 million is budgeted for research and surveys over the following three years.

Once regional councils are presented with data on their deep sea coral areas, they have discretion as to whether to designate them for special management measures. We believe that the councils should be required to take some measures to protect extensive deep sea coral areas from damaging activities. Currently, the burden of proof is on advocates to show why areas of deep sea corals should be protected. We would like to see the burden of proof shifted to the councils to show why areas of extensive coral concentrations should not be protected once they are identified. Another possibility here is to require councils to protect some percentage, say between 20—50 percent, of any deep sea coral areas discovered within their borders.

Recommendations:

- Expand the definition of deep sea corals to include deep sea sponges and other unique deep sea organisms.
- Narrow the focus of habitat protection to the smaller, more meaningful HAPC areas
- Require regional councils to protect identified concentrations of deep sea corals with HAPC designation and management measures that prohibit bottom contact fishing gear.

International Marine Law Enforcement and Pirate Fishing Is A Weak Link in Achieving Healthy Oceans

Protecting marine habitat from damaging fishing techniques and other threats with regulations and maps is certainly the first step in achieving sustainable fisheries and healthier oceans. But statutes, regulations, and maps do not enforce themselves. The ocean is a big place with lots of opportunity for unobserved illegal behavior. To stop any of it requires resources to find and arrest lawbreakers and the will to prosecute them. Marine Conservation Institute became interested in this field because we believe that setting aside Marine Protected Areas or other kinds of habitat protections is just the first step in ocean healing. These places must be well managed *and* well protected from those who flout protection laws.

Please note that I am NOT going to talk about domestic enforcement of fishery laws. Instead, I want to focus on how NOAA enforces the fishery laws around our Pacific territories, national marine monuments, and around the world so as to reduce Illegal, Unregulated and Unreported or pirate fishing. To begin, the U.S. and other nations enforce fishery laws with a mix of 18th century and 20th century technology that needs to be brought into the 21st century. What do I mean?

While some fishing vessels carry ship to shore self-identification systems like the Vessel Monitoring System (VMS) and ship to ship and ship to satellite systems (Automatic Identification System—AIS), many do not. Some fishing vessels carry an internationally recognized boat identifier, like a vehicle identification number here in the US, but many do not. Some U.S. vessels even carry automatic monitoring equipment that allows compliance personnel to watch or monitor the fishing effort from 1,000s of miles away. This is the 20th century part of the equation. In the final analysis, we believe that most enforcement actions happen because the U.S. Coast Guard boards a suspicious fishing vessel 18th century style and finds or verifies a violation of U.S. or international fishery laws during the inspection.

What would a 21st century integrated monitoring and enforcement system look like? Unfortunately, none exists, a problem that ought to be remedied when Magnuson-Stevens is reauthorized. Fortunately, the pieces of such a system do exist; they just have never been put together and used as a system.

Our 21st century system would use a variety of technologies to detect fishing boats in any protected area, starting with high frequency radar to detect vessels up to 50 miles offshore, even those not carrying VMS or AIS or boats with their equipment turned off to avoid detection. There would be an array of moored buoys equipped with hydrophones to listen for approaching boats and to calculate their positions. This information would be communicated up to a satellite then down to earth at a monitoring center. Alternatively, wave gliders (fancy surfboard-like boats that can navigate independently across the ocean) or autonomous sailboats could also carry hydrophones and cameras to detect and take pictures of offending fishing vessels. Finally, having identified a potential offender and its location, an aerial drone could be flown to the vessel's position to take pictures of potentially illegal activity and of the vessel's identifying name and flag. This information would be beamed back to the monitoring center, the offending vessel would be tracked to its next port of call or interdicted on the high seas by the U.S. Coast Guard, and then boarded by enforcement authorities to look for evidence of illegal activity.

Someday, we believe that elements of this system will be in place to protect some of our most valuable and threatened places like the Pacific marine national monuments and territories. To get there, we need a program at NOAA to do research and development on integrating these new technologies and the money to pilot test them in real life situations. And to be honest, the final element of this picture—boarding the vessel in a foreign port—requires a degree of international cooperation on fishery law enforcement that is unusual today, though not unheard of. To really encourage the last enforcement step to spread internationally, the U.S. needs to ratify and implement international agreements like the Port States Agreement that allows interception, inspection and seizing of the offending vessel in port or refusing entry to the vessel.

Why the fuss over international and Pacific marine fishery law enforcement? There are two very important reasons:

1. *Significant economic impact on U.S. fishermen and fishing communities.* According to best estimates, the global value of IUU fishing averages between \$10 and \$23 billion per year—meaning nearly one out of every five dollars of fish sold in international commerce is thought to be derived from IUU sources. Although IUU fishing can be prosecuted under several current U.S. laws, additional measures, both national and international, are needed to further reduce this pirate fishing. Although no direct studies of these impacts have yet been made, primarily due to the difficulty of identifying and tracking IUU catch, reasonable assumptions and existing data indicate that the U.S. may be importing in the range of \$1.7 billion worth of pirate seafood each year—accounting for around 18 percent of U.S. imports of wild caught seafood. Broadly speaking, the possible range of IUU seafood imports to the U.S. is \$1.2–\$2.9 billion, or 13 percent–31 percent of the \$9.4 billion worth of imported wild caught seafood. If this seafood was replaced with domestically caught and processed seafood, an important *assumption*, U.S. fishing and related industries might be able to reclaim as many as 28,300 jobs in coastal areas and provide other benefits to coastal economies. Lost revenues and jobs by state appear below.

Total Landings Revenue, Revenue Lost to IUU Fishing, and Number of Jobs lost to IUU Fishing for the U.S. Seafood Industry for 2011, by state.

State	Total Landings Revenue (Millions of Dollars)	Total Revenue Lost Due to IUU Fishing (Millions of Dollars)	Number of Jobs Lost Due to IUU Fishing
Alaska	1,911.54	612	10,190
Massachusetts	565.238	181	3,010
Maine	424.712	136	2,265
Louisiana	333.619	107	1,780
Washington	331.404	106	1,765
Texas	239.082	77	1,275
Florida	224.646	72	1,200
New Jersey	214.191	69	1,140

Total Landings Revenue, Revenue Lost to IUU Fishing, and Number of Jobs lost to IUU Fishing for the U.S. Seafood Industry for 2011, by state.—Continued

State	Total Landings Revenue (Millions of Dollars)	Total Revenue Lost Due to IUU Fishing (Millions of Dollars)	Number of Jobs Lost Due to IUU Fishing
California	201.269	64	1,070
Virginia	191.665	61	1,020
Oregon	148.337	48	790
Hawai'i	91.513	29	490
Maryland	76.722	25	410
Rhode Island	75.956	24	405
North Carolina	71.177	23	380
Alabama	50.941	17	270
New York	37.625	12	200
Mississippi	30.3	10	160
New Hampshire	23.483	7	125
South Carolina	23.268	7	125
Connecticut	19.668	6	105
Georgia	16.295	5	85
Delaware	7.091	2	40
<i>Total</i>	<i>\$5,309.742</i>	<i>\$1,700</i>	<i>28,300</i>

Source: Plundering the Seas; The Damage from Pirate Fishing on U.S. Fishermen. October 2013 Draft. Available from Marine Conservation Institute by request.

2. *Significant impact on priceless natural resources around the world.* Even when marine habitat is protected with a Marine Protected Area designation of some kind to achieve a conservation objective, unless the area is enforced, the designation often draws IUU fishermen to the location to feast on resources that are frequently richer than in surrounding waters. Protecting habitat without real protection through enforcement is no good. Marine Protected Areas become Marine Poaching Areas.

Recommendations for Improving Marine Law Enforcement under MSA

Congress should improve the Magnuson-Stevens framework for handling nations and vessels that violate U.S. fishery laws, international fishing treaties, or RFMO agreements, especially countries and vessels that are repeat offenders. Getting countries in trouble with a 'blacklist' every two years, working for remediation, and assessing progress has not resulted in a large decline in illegal, unreported or unregulated fishing or easier enforcement. This Committee and NOAA ought to investigate some other means of faster, more transparent, and more effective enforcement. One idea is to involve the flag issuing county more directly in the enforcement action. The principle of "You flag it; you fix it or pay for it" would put some responsibility on the nations that flag fishing vessels to help in enforcing the laws or paying for violations of those vessels they 'rent' their flag to.

Congress might want to consider a requirement for universal AIS or VMS usage and comprehensive fishing vessel ID for all boats catching fish that might be imported into the US. The exporter or producer would have to certify that each shipment was caught by a vessel equipped with AIS/VMS and a vessel ID.

Congress should establish a research, development and pilot program for advanced technologies for marine monitoring, vessel identification, and enforcement. It might first be used in U.S. marine monuments, marine sanctuaries, and possibly elsewhere. This program would push forward new technologies like high frequency radar, acoustics, aerial drones, wave gliders, etc. for more cost effective marine law enforcement than currently available via U.S. Coast Guard cutters and aircraft.

The Senate should streamline existing laws and treaties related to IUU fishing by passing S.269 (International Fisheries Stewardship and Enforcement Act), a bill

that the late Senator Inouye repeatedly introduced, preferably in a standalone bill without waiting to do so in MSA reauthorization.

The Senate should ratify the Agreement on Port State Measures to Prevent, Deter and Eliminate illegal, unreported and unregulated fishing and pass the implementing legislation embedded in S. 267 (Pirate Fish Elimination Act) which will be used by the U.S. and other countries around the world to deny port entry to vessels suspected of trying to unload IUU fish.

Congress should consider asking NOAA, the U.S. Coast Guard, and the Department of Justice for some basic information about what their fishery enforcement effort, case load and case status and disposition is. It is difficult to understand the law enforcement enterprise without some basic data that should be available to the public and law makers.

Finally, a provision in MSA's Enforcement section (Section 3119d) requires offending vessels in large areas of the Pacific be escorted or towed to Guam rather than the nearest U.S. court available in Samoa, Honolulu, or the Northern Mariana Islands. It would be more efficient to allow the Coast Guard to take the vessel to the nearest or most convenient district court at its own discretion. There are one or two cases where vessels have had to be towed much farther than needed which discourages proactive enforcement by the authorities who have to pay for interdictions and towing.

Recommendations for Marine Law Enforcement and Fighting Illegal, Unreported, and Unregulated (IUU) Fishing

- Equipment for VMS and/or AIS should be carried on board all commercial fishing vessels and turned on at all times in U.S. waters.
- Edible fish imports to the U.S. should be required to be accompanied by verification from the producer or exporter that AIS/VMS was used on board when the fish was caught by a vessel(s) accompanied by a specified vessel ID number. There should be stiff penalties for false information.
- All fishing vessels should be equipped with a unique vessel ID number like a U.S. vehicle VIN.
- NOAA, U.S. Coast Guard, and the Departments of State and Justice should develop an improved framework beyond the biennial Black List for reducing IUU fishing.
- Senate should establish a research, development and pilot program for advanced technologies for marine monitoring, vessel identification, and enforcement.
- Senate should ratify the Ports State Agreement and pass S. 267 to implement this agreement aimed at reducing international IUU fishing by making sales of IUU fish much harder.
- Senate should pass S.269 to streamline existing fishing enforcement laws and provisions.
- Senate should require basic information about fishery enforcement activity and case load to be provided to relevant committees and the public on some periodic basis.
- Senate should modify MSA to enable the U.S. Coast Guard flexibility in where it takes offending vessels in the Pacific.

Financing Conservation and Enforcement Efforts

NOAA's budget for marine enforcement, especially remote Pacific and international enforcement efforts is tightly constrained. The Office of Law Enforcement in the National Marine Fisheries Service which collects evidence for cases, the Office of General Counsel for NOAA which issues violations and summary settlements, and the Justice Department's Environment and Natural Resources Division which prosecutes cases all have limited staff and resources for fisheries and habitat enforcement.

In an effort to reduce backlogs and create a more robust enforcement effort, we recommend that the Senate consider providing additional dollars for these activities from the Saltonstall-Kennedy program that receives 30 percent of U.S. tariffs on imported fish and fish products. The Senate could direct NOAA to take some of this existing money and put it into enforcement. Or, we believe it would be reasonable to modestly increase the tariffs on imported fish and fish products to support better international enforcement. Since up to 20 percent of imported fish is very likely to be caught by international pirate fishing, doesn't it make sense to raise the tariff on fishery imports to try to reduce the amount of pirate fishing worldwide?

The Congress (taxes and tariffs have to start in House Ways and Means) might consider raising the tariffs (or asking the relevant authority to do so) on imported

fish and fish products which today average about 1.4 percent of the value of the imports. This works out to a current average tariff of \$0.04 per pound. Increasing the average tariff by a penny a pound would raise approximately \$50 million per year for: (1) research and development and a pilot program for 21st century fishery monitoring and enforcement and for (2) fishery enforcement efforts aimed at reducing IUU fishing. With average tariff rates of \$0.04 per pound, it is difficult to imagine any trade distortion if the average tariff goes up by one cent per pound, or any substantial impact on prices at the consumer level. In addition, the tariff increase would not be seen as subsidizing the U.S. fishing industry, an important WTO criterion, as we understand it.

Hawaii and the Endangered Hawaiian Monk Seal

Although the MSA is the focus of this hearing, I also want to point out the critical importance of the National Marine Fisheries Service's (NMFS) other major statutory authorities—running an effective protected species program that conserves and rebuilds population of marine mammals and other listed marine species. Let's not forget that conservation of legally protected species is hugely important to the preservation of marine biodiversity and healthy ecosystems. Preservation of marine biodiversity and healthy oceans should in fact be a co-equal objective of NOAA's along with sustainably managing fisheries.

MCI conducts a field program in Hawaii whose purpose is to build support among fishermen and local communities for the protection of the Hawaiian monk seal, one of the four rarest seals on Earth. The seal's entire population of approximately 1,000 lives entirely in Hawaiian waters. Marine Conservation Institute started this program because it was our conclusion that NMFS lacked the capability to reach out to local fisherman and communities on a regular basis to explain its program for the monk seal and to build understanding and trust by listening, really listening to these groups.

We are now trying to fill this role as an 'unofficial' partner of the agency. We regularly fill the communication gap between NMFS and fishermen and average citizens in Hawaii. We do this with regular conversations in town meetings, docks, fishermen hangouts and beaches. We run focus groups on seal conservation, distribute materials on how to avoid human—seal interactions, and work with volunteer groups doing seal conservation work.

Based on our two years of experience at this work, we are preparing a report on what is needed to improve the management of human-monk seal interactions in Hawaii by both NMFS and the state Department of Land and Natural Resources. The report will be released later this year.

One lesson to be learned from our experience in Hawaii with the monk seals that is relevant to MSA reauthorization is this. NOAA's ability to communicate with affected local communities about fishery or protected species issues needs to improve and can improve. While it is a science and regulatory agency at its core, NOAA needs to communicate with the public and affected parties like fishermen even when those messages are hard ones. And finally, there may be a useful role for organizations like ours—small nonprofits—to get involved in other situations laden with conflicts and mediate between NOAA and other stakeholders.

Thank you very much for your time and attention to improving the Magnuson-Stevens Act. MSA and its implementation by NMFS and NOAA has helped make the U.S. an admired leader in marine conservation and sustainable fisheries around the world. We want to see the Senate build on that good progress and make MSA programs even better.

Senator BEGICH. Thank you very much for your testimony.

Ray Toste, President and General Manager, Washington Dungeness Crab Fishermen's Association.

Ray, thank you very much for being here.

STATEMENT OF RAY TOSTE, PRESIDENT AND GENERAL MANAGER, WASHINGTON DUNGENESS CRAB FISHERMEN'S ASSOCIATION

Mr. TOSTE. Thank you, Chairman Begich, and Ranking Member—

Senator BEGICH. Your microphone, there we go.

Perfect, thank you very much.

Mr. TOSTE. Senator Cantwell would just as soon take the mike away from me.

[Laughter.]

Mr. TOSTE. Good morning.

Chairman Begich, Ranking Member Rubio, and Senator Cantwell, and members of the Committee, thank you for the opportunity to testify on MSA Reauthorization.

My name is Ray Toste and I reside in Westport, Washington. I'm President and General Manager of the Washington Dungeness Crab Fisherman's Association and I'm also co-founder of the Ocean Coalition of Fishermen, an umbrella group which, over the last 17 years, has grown to represent 17 member organizations, which represents over 5,000 individual members. Our members are in Washington, Oregon, California and Alaska.

Mr. Chairman, I have been fishing commercially for almost five decades. I was going to scratch that out, but—I'm proud to say that I'm still a working fisherman to this very day. My job takes me fishing not only in my home state but to California, Oregon, Washington and Alaska. It's profoundly gratifying to know that my work brings delicious American seafood to restaurants and kitchens across the country. It's the only way they—the American public—can share in this great heritage and it is their resource.

I was going to skip something here because I was told to, but I can't. And it has to do with Senator Cantwell and Mr. Begich, who I met in Kenai more than once, especially when you were campaigning. You folks have shown a lot of courage, especially last week in Seattle. It's easy to be a Seahawk fan. It's not so easy to go against a powerhouse like you did on the Pebble Mine thing. Because of that, my youngest son will now be buying an outfit in Bristol Bay. Thank you, guys. You did well.

I've always believed that conserving marine resources for future generations is a central part of a fisherman's responsibility. It's just simply the right thing to do. But as I grow older, I feel responsible to those who come after us more strongly than ever. For me, it's no longer an abstract thing; it's a personal thing. All three of my sons I have put through college, they all live in Westport, and they all commercial fish. The fact that that option was available to them speaks to improved fishery management.

Although I don't participate in the Pacific Groundfish Fishery, I've watched it closely for many years. Not having a stake in the fishery, I believe I can comment as a neutral party. A decade or more ago, it was truly a mess. Overfishing had depleted the resource, hurting the environment; bottom line, it was bad. But not having a vested interest in it and going occasionally, sometimes you get a real good perspective of how well the Pacific Council has done. They've addressed the bycatch. It dramatically reduced.

I'm here to tell this committee: The sustainability mandates and Magnuson-Stevens Act are working. Pacific Fishery Management Council is to be commended for its role improving and turning the fishery around.

I also want to address the management of the Dungeness Crab Fisheries. This is a unique fishery requiring careful and customized management. I am pleased to report that management is working well. Specific management arrangements were put in place in 1996,

granting interim authority to the states of Washington, Oregon and California up to 200 miles. The system has been uniquely successful for the Pacific and it's a model that works there; may not work for somewhere else, but it works there.

And since interim authority was first granted, a lot of key management improvements have been made and they include: L.E.200, which I spent 89 coastal port meetings to achieve and it ended cross-boundary fishing; we then went to pot limits in Washington, Oregon, and now in California; pot tags were introduced to aid in enforcement; log books, which helped science and Marine Spatial Planning.

And better and equal protocols which have helped us fish at the right time and have led to better product for the consumers. Protocols will be working now together with Washington, Oregon, California. We test the same. It works.

I'm optimistic about the future Pacific fisheries. Sustainable science-based management has helped to improve fisheries' health. The choice of my three sons, with college degrees, speaks for itself. So long as Congress doesn't do damage to a good law and repeat the mistakes of the past, I believe they have a promising future working as commercial fishermen for many years.

And once again, Senator Cantwell, I want to thank you. I have no idea how you got the money to do it when you did it, the Doppler radio is a huge success. It is truly going to save lives. And one of those could well someday be a grandson. There are two things I know how to do well, I think: catch fish and create sons.

[Laughter.]

Mr. TOSTE. And this is a huge help to Grace Harbor and everybody thanks you.

Thank you, Mr. Begich.

[The prepared statement of Mr. Toste follows:]

PREPARED STATEMENT OF RAY TOSTE, PRESIDENT AND GENERAL MANAGER,
WASHINGTON DUNGENESS CRAB FISHERMEN'S ASSOCIATION

Introduction

Chairman Begich, Ranking Member Rubio, and Members of the Committee, thank you for the opportunity to testify today on West Coast and Western Pacific perspectives on Magnuson-Stevens Act (MSA) reauthorization. My name is Ray Toste. I reside in Westport, which is located on the west coast of southwest Washington State, on Grays Harbor. I am President and General Manager of the Washington Dungeness Crab Fishermen's Association (WDCFA). I am also the co-founder of the Ocean Coalition of Fishermen, an umbrella group which over the last 17 years has grown to represent 17 member organizations, which in turn represent over 5,000 individual members from Alaska, Washington, Oregon and California. I am pleased to be testifying today on behalf of both WDCFA and the Ocean Coalition of Fishermen.

Mr. Chairman, I have been fishing commercially for almost five decades. And although I'm definitely not as young as I used to be, I'm proud to say that I'm still a working fisherman to this very day. My job takes me fishing not only in my home state of Washington, but also off the coasts of California, Oregon and Alaska. I'm deeply proud of what I do. For me, fishing is not merely a job—it's a way of life. And it's profoundly gratifying to know that my work brings fresh, delicious American seafood to restaurants and kitchen tables across the country.

I also believe that a central part of being a good fisherman is being a good steward of the resource. To that end, I currently work with seven different fishing organizations. I serve on the Grays Harbor Marine Resources Committee, and on the Washington Coastal Marine Advisory Council at the Governor's request. I have worked closely with local, state and the Federal governments on many marine issues. One is conservation of Bristol Bay, where some of the most productive salmon runs in the world are threatened by a massive mine development proposal. Mem-

bers of this committee have been champions for America's fishermen in pushing back against the unwise Pebble Mine proposal. I particularly want to thank you, Chairman Begich, for your recent comments, as well as Senator Cantwell for her leadership on this vital issue.

Magnuson-Stevens and Pacific Fisheries

I've always believed that conserving marine resources for future generations is a central part of a fisherman's responsibilities—it's simply the right thing to do. But as I grow older, I feel a responsibility to those who come after us more strongly than ever. For me it's no longer an abstract thing; it's personal. All three of my sons have chosen to become working commercial fishermen just like me. It's a source of deep happiness for me that after leaving home and earning college degrees all three of my boys chose to come back to Westport and make commercial fishing their livelihood. The fact that the option was available to them speaks to improved fisheries management in the state of Washington and across the entire Pacific region.

The truth is, I haven't always been optimistic about our ability as a country to conserve our marine resources. Although I don't participate in the Pacific groundfish fishery, I've watched it closely for many years. Not having a stake in that fishery I believe I can comment as a neutral party—a disinterested observer. A decade or more ago it was truly a mess. Overfishing had depleted the resource, hurting not only the environment but also the bottom line of fishermen. Depleted fisheries and poor management meant many couldn't make a living and didn't see a future. Today, the picture is very different. Communication and cooperation between the National Marine Fisheries Service (NMFS) and the fishing industry has improved. Overfishing has been addressed and bycatch has been dramatically reduced.

I'm here to tell this committee that the sustainability mandates in the Magnuson-Stevens Act are working. They've forced much-needed changes in the groundfish fishery in the Pacific. And now fishermen are enjoying the benefits. The Pacific Fishery Management Council is to be commended for its role in improving management and turning the fishery around. This committee should learn from this experience. First and foremost, it should do nothing in the upcoming reauthorization of MSA to weaken the sustainability mandates. They are working, they are needed, and they should be retained.

As in any fishery there are still many challenges and improvements needed to how Pacific fisheries are being monitored and managed. Presently resource constraints, both in funding for the Council and for NMFS are hindering progress in the region. The regional NMFS office has been consistently understaffed during the last few years meaning that Council priorities can not be addressed in a timely fashion. Lack of time and resources is continually cited as a constraint for why management actions or regulatory reforms important to the industry are postponed.

We should be looking to help fishermen adapt to management requirements and simplifying regulations to ensure they are not overly burdensome to either the industry, enforcement authorities or the National Marine Fisheries Service. This will increase profitability for the industry and reduce cost to government agencies.

Additionally, with more robust funding we can increase and improve fisheries data. It is important to improve the quality of science being used to manage fisheries. Increased opportunities for organized collaborative research would be welcome and could reduce costs of scientific data collection while also improving data quality. Often there are significant time lags between when a stock is assessed and when those assessments are reflected in management, which can lead to skepticism among fishermen about management decisions.

Securing the long-term durability of Pacific fisheries will require reducing costs, improving data to ensure industry access to healthy target species, and leveraging the high level of accountability in Pacific fisheries to improve the price and market opportunities of Pacific fishery resources. I want future generations of fishermen to be able to participate in profitable fisheries that are managed reliably and in coordination with the fishing industry.

The Dungeness Crab Fishery

I also want to address management of the dungeness crab fishery. This is a unique fishery, requiring careful and customized management. I'm pleased to report that management is working well. Specific management arrangements were put in place in 1996, granting Interim Authority to the states of Washington, Oregon and California to manage the fishery out to 200 miles. That system has been uniquely successful for the Pacific. It's not a model that would work in other fisheries, but it works for us.

Since Interim Authority was first granted it has enabled many key management improvements. These include:

- L.E.200, which ended cross-boundary fishing;
- pot limits in Washington and Oregon, and now in California;
- pot tags, which aid enforcement;
- log books, which aid science and help with Marine Spatial Planning; and
- better and equal testing protocols, which have helped us fish at the right time and led to a better product for consumers.

As this Committee considers tweaks and adjustments to the Magnuson-Stevens Act, I believe it should make this highly successful management system of the dungeness crab fishery permanent. The system has been in place for almost 20 years and it is working well. So long as Interim Authority is not made permanent by Congress there is always a risk that it won't be extended. I urge the Committee to act on this recommendation. It's time.

This committee should also consider whether a buydown of the fishery is possible. For complex reasons that I'd be happy to explain, a previous Federal court decision resulted in the fishery becoming overcapitalized. So long as seasons are strong—as they have been in the last few years—dungenous crab fishermen can get by. But if we have successive bad seasons it will be the ruination of what is Washington's biggest fishery. I'm very sad to say that this season is shaping up to be the worst season since 1973. A way to reduce capitalization of the fishery is urgently needed. All Washington State fisheries that fell under Federal tribal management judicial regulations have been mitigated with some sort of buy down except for coastal crab. The buy back is literally in place at this time—the heavy lifting is done, but due to lack of Federal and state funds a much needed buydown is on hold. Many other fisheries have received Federal assistance in reducing capitalization. I urge this committee to help provide similar assistance in securing the long-term future of the dungenous fishery.

Conclusion

Mr Chairman, I am optimistic about the future of Pacific fisheries. Sustainable, science-based management has helped improve fisheries' health. A state-of-the-art Doppler radar, which Senator Cantwell and her staff worked so hard to bring to the harbor area a couple of years back, is keeping fishermen safer on dangerous Pacific seas. It's saving lives, and we're all very grateful to the Senator for that. I served on her blue ribbon panel. Other new technologies are helping improve management.

I do encourage the Committee to consider how we can ensure more young people are able to enter the business. One thing we must prioritize is ensuring that financing is more readily available to those starting out. For my three sons, however, their choice to become fishermen speaks for itself. So long as Congress doesn't do damage to a good law and repeat the mistakes of the past, I believe they have a promising future working as commercial fishermen for many years to come.

Senator BEGICH. Thank you very much. Thank you for your testimony.

Next, I have Joe Daze, Executive Director, Washington Trollers Association.

STATEMENT OF JOE DAZEY, EXECUTIVE DIRECTOR, WASHINGTON TROLLERS ASSOCIATION

Mr. DAZEY. How does this thing work? OK.

Thank you, Senator Begich. And also, thank you, Senator Cantwell, for the invitation to address the Committee.

I am the Executive Director of the Washington Trollers Association. And in preparing my comments, I consulted with the California Salmon Commission, the Oregon Salmon Commission, and the Oregon Albacore Commission. We have four issues we'd like to bring out. The first has to do with definitions and is something that rankles fishermen at every committee meeting I go to. The terms "overfished" and "overfishing" are used extensively throughout the Magnuson-Stevens Act. These terms are misleading and are used when harvest is not the reason for a stock's depleted status. There are instances in the lower Columbia River of stocks that

have an extremely high probability of extinction within the next 50 years even with zero harvest levels.

The HSRG has a 4H model that attributes stocks' impacts to hydroelectric operations, hatcheries, habitat degradation, as well as harvest. The Magnuson-Stevens Reauthorization Act should provide a distinction between overfished and depleted designations.

Next, we'd like to see more flexibility in rebuilding programs. Due to a predicted low return of Klamath Fall Chinook in 2006, the Pacific Fishery Management Council, with guidance from NMFS, felt constrained to close the fishery. Now the stock was not endangered, the fishery was closed due to a predicted low return that was below a floor number that would ensure a maximum productivity. This closure came on the heels of a greatly reduced fishery in 2005 and the result was \$150 million in economic loss and \$60.4 million in disaster relief to fishermen in Oregon and California. Without fishing opportunity there's a significant toll on families, unemployment goes up, there's increase load on social services, and local governments suffer from decreased tax revenue.

This is one example. There have been a lot of closures of complete or partial of salmon fisheries over the years. Reauthorization of Magnuson-Stevens should provide for consideration of social and economical impacts on fishing communities by allowing a phase-in of rebuilding programs over 3 years.

We'd also like to talk about annual catch limits, or ACLs. The Albacore Tuna Fishery is managed by the IATTC and the Western Pacific Fishery Commission, as well as the U.S. Fishery Management Councils. Establishing unilateral conservation measures such as ACLs, or limited entry, will constrain the U.S. fleet while having little or no effect on conserving the resource. Foreign fleets are building and ours are not. If such measures are taken, U.S. representatives to international treaty discussions will have diminished ability to protect U.S. interests. The Council should have flexibility in deciding the timing and benefit of internationally managed stocks with ACLs. And in addition, the establishment of an annual catch limit can have significant economic impacts on fishing communities. The Council should have the ability to take this into consideration when deciding an ACL.

We'd also like to talk about data collection. Data collection can benefit from collaboration between fishermen and scientists. This has been demonstrated by a project undertaken in 2007 using disaster relief money made available to fishermen in Oregon and California. A project was undertaken to collect tissue samples from Chinook salmon which would then be analyzed for their genetic markers. Salmon returns are currently estimated using the fishery resource allocation model, the FRAM. The FRAM gets its inputs from coded wire tags. There are several issues with coded wire tags, notably that they only sample a small portion of hatchery stocks and no wild stocks. And it's the wild stocks that are endangered.

The coded wire tags are also collected at shore-side processors. If they are collected at sea, we've got a better idea of where the fish were actually caught; where the distributions of fish stocks are. The GSI samples have shown different distributions of fish stocks than modeled in the FRAM. GSI at sea collection of samples

has the potential to significantly improve salmon management by shifting effort away from endangered stocks. The MSA Reauthorization Act should encourage collaborative research between fishermen and scientists.

Thank you.

[The prepared statement of Mr. Dazey follows:]

PREPARED STATEMENT OF JOE DAZEY, EXECUTIVE DIRECTOR,
WASHINGTON TROLLERS ASSOCIATION

Definitions

The terms “overfished” and “overfishing” are used extensively throughout the Magnuson-Stevens Act. These terms are misleading and are used when harvest is not the reason for a stocks depleted status. There are, for instance, stocks in the Lower Columbia River that have an extremely high probability of extinction within 50 years with zero harvest levels. The Hatchery Science Review Group (HSRG) has developed a 4H model that attributes impact on stocks to hydroelectric operations, hatcheries, and habitat degradation as well as harvest. In 2002, low rainfall and fish-blocking dams led to an infestation of parasites that killed almost all of the out-bound juvenile salmon. This led to an overfishing concern in 2006 even though fishing was not the cause of the problem. Reauthorization of MSA should provide a distinction between overfished and depleted designations.

Flexibility in Rebuilding Programs

Due to a predicted low return of Klamath Fall Chinook in 2006, the Pacific Fishery Management Council, with guidance from the National Fishery Management Service, felt constrained to close the fishery. The stock was not endangered; the fishery was closed because the predicted return was below a floor number that would ensure maximum productivity. This closure came on the heels of a greatly reduced fishery in 2005. The result was \$150 million in economic losses and \$60.4 million in disaster relief to commercial and sports fishermen in Oregon and California. Fuel docks, ice plants, and other support services were hurt and some closed. In many coastal communities, fishing is a major source of employment. Without fishing opportunity, there is a significant toll on families, unemployment goes there is increased load on social services, and local governments suffer from lost tax revenue.

This is one example. Salmon fisheries in California, Oregon, and Washington, have experienced many partial or complete closures over the years. Reauthorization of MSA should provide for consideration of social and economic impacts on fishing communities by allowing a phase-in of rebuilding programs over three years.

Annual Catch Limits/International Agreements (ACLs)

The albacore tuna fishery is managed by the Inter-American Tropical Tuna Commission and the Western/Central Pacific Fishery Commission in addition to the U.S. Fishery Management Councils. Currently foreign countries are increasing their fleets. Establishing unilateral conservation measures such as ACLs or limited entry will constrain the U.S. fleet while having little to no effect on conserving the resource. If such measures are taken, U.S. representatives to international treaty discussions will have diminished ability to protect U.S. interests. The Councils should have flexibility in deciding the timing and benefit of ACLs on internationally managed stocks. In addition the establishment of an annual catch limit can have significant economic impacts on fishing communities. The Councils should have the ability to take this into consideration when deciding an ACL.

Data Collection

Collaboration between fishermen and scientists will always benefit data collection opportunities. As an example, in 2007 using disaster relief funds made available to fishermen in Oregon and California, a project was undertaken to collect tissue samples from Chinook salmon which were then analyzed for their genetic markers. The process involves fishermen taking a fin clip sample from fish and recording the GPS coordinates and other measurements. These data are then sent to one of the regional science centers for analysis. Salmon stock returns are currently estimated using the Fishery Resource Allocation Model (FRAM). Inputs to the FRAM are based on coded wire tags. There are several issues with coded wire tags, notably that they apply only to a small percentage of hatchery stocks and no wild stocks. In addition, they are collected when the fish are delivered to a shore-based processor. At-sea collection of GSI samples has shown different distributions of fish stocks than modeled in the FRAM and has the potential to substantially improve

management of salmon by shifting effort away from endangered stocks. The MSA Reauthorization Act should be amended to encourage collaborative research.

Senator BEGICH. Thank you very much.

Last person we have is Dr. Trevor Branch, Assistant Professor Aquatic and Fishery Science, University of Washington.

Thank you very much for attending.

**STATEMENT OF TREVOR A. BRANCH, PH.D., ASSISTANT
PROFESSOR, SCHOOL OF AQUATIC AND FISHERY SCIENCES,
COLLEGE OF THE ENVIRONMENT, UNIVERSITY OF
WASHINGTON**

Dr. BRANCH. Thank you very much, Chairman Begich and other members of the Subcommittee, for the privilege of testifying at this hearing.

It's, of course, a special honor to speak before Senator Cantwell from my hometown of Edmonds and, of course, on the eve of this weekend's Super Bowl.

I'll focus my remarks on key elements of the Magnuson-Stevens Act and the impact of fisheries on the West Coast to the U.S.

First, some context. Globally, we've reached the limits of what it is possible to catch from the ocean. Worldwide catch has peaked in the mid-1990s and have since declined by about 5 percent and 30 percent of the world's fisheries are overfished.

U.S. fisheries are doing somewhat better. Yesterday's updated report from NOAA shows that 20 percent of U.S. fisheries are overfished and 13 percent are experiencing overfishing. These encouraging results arise directly from the 2006 Reauthorization of the Magnuson-Stevens Act which requires annual catch limits, or ACLs, and strict rebuilding time periods for overfished stocks.

In comparison to the world and the U.S. as a whole, West Coast fisheries are in good shape biologically. Only 8 percent of assessed stocks are overfished and none are experiencing overfishing. On the West Coast, although more than 90 species of groundfish are managed by the council, regulations are driven by seven species that are under rebuilding plans. Since the bottom trawl fishery catches many species together, strict regulations have been put into place, including: closing productive fishing areas; gear restrictions; vessel buybacks; highly restrictive ACLs; and most recently catch shares, which include 100 percent observer coverage.

One of the key issues in the groundfish fishery is the real fear of a disaster tow, where a single large catch could stop individuals fishing for all species for the entire year. In particular, catch limit for yelloweye rockfish is just 2,205 pounds which is less, I might add, than the starting line of the Seattle Seahawks.

[Laughter.]

Dr. BRANCH. And that amounts to just 20 pounds of yelloweye per boat for the entire year. If these limits are exceeded, pounds must be bought or leased to others before they can continue fishing.

It's a testimony to the strong incentives on the catch share fisheries and also the fear of the fishermen that the fleet caught just 6 percent of this yelloweye quota in 2013. In most respects, catch shares are working as they were intended to. They allow maximum flexibility in when, where, and how to fish. And the catch shares

discards have declined, revenues have gone up and catches of the rebuilding species have gone down. However, profits could be still higher.

The focus on this fishery in rebuilding the weakest link has led to substantial under-catching of the ACLs. Only three of 26 stocks in the catch share fishery have catches anywhere close to the ACLs or catches for the average stock are just 27 percent of the respective ACL. The net result is that about ten times more catch is lost due to under-fishing than to overfishing.

Catch shares have had a major positive impact on the biology and economics of the West Coast groundfish fishery. Looking forward, I predict that catch shares will be called upon to address allocation issues in the future. For example, charter boats might buy quota from the commercial fishers to increase bag limits for their clients.

In revising the Act, careful thought is needed as to whether or not quota should be sold or leased across different sectors; such as trollers, longliners, recreational fishers, charter boats, and tribal groups.

ACLs are a key requirement under the MSA. Without annual fisheries independent surveys, stock assessments will be inaccurate and so will the ACLs. The reauthorization should stress the critical importance of continued or perhaps expanded funding of annual bottom trawl surveys, pot surveys, hook and line surveys, and diver surveys depending on the region.

Setting ACLs has also greatly increased the demand for stock assessments. It's estimated that NOAA will need to add 140 new hires to the current 90 capable of running these assessments. However, funding has lagged in the two major programs that support greater student training in this field. The first program is a fellowship program between NOAA and Sea Grant that now covers less than half of the typical Ph.D. The second program is NSF which rarely funds fisheries' research, especially since the NSF NOAA program, called CAMEO, fell victim to budget cuts.

To summarize, U.S. fisheries are in better shape than the rest of the world thanks to MSA. The focus in rebuilding West coast species has been biologically successful, but will take many years because these species, a lot of them, are very long-lived. Extra flexibility in rebuilding timelines will greatly increase revenues and profits currently lost when fishers avoid the overfished species.

The key to future success is prioritizing annual surveys and training stock assessment scientists to meet NOAA's current and future needs.

Thank you once again for inviting me to testify.

[The prepared statement of Dr. Branch follows:]

PREPARED STATEMENT OF TREVOR A. BRANCH, PH.D., ASSISTANT PROFESSOR, SCHOOL OF AQUATIC AND FISHERY SCIENCES, COLLEGE OF THE ENVIRONMENT, UNIVERSITY OF WASHINGTON

Good morning Chairman Begich, Ranking Member Rubio, and members of the Subcommittee. I am very grateful for the invitation to speak about the progress made to date, and ongoing challenges in moving to sustainable fisheries management under the most recent reauthorization of the Magnuson-Stevens Act. I will address key elements of the Act and their impact on fisheries on the West Coast of the United States. My name is Trevor Branch and I am an Assistant Professor at

the School of Aquatic and Fishery Sciences, part of the College of the Environment at the University of Washington.

Background: fisheries status and trends

Globally, we have reached the limits of what it is possible to catch from the ocean. FAO data show that marine catches peaked at 86 million tons in the mid-1990s and have since declined by 5 percent. Of the fisheries that produce most of the world's catch, 30 percent are overfished, 57 percent sustainably fished, and only 13 percent are still developing.^{1,2}

American fisheries are doing somewhat better than the rest of the world. According to the latest NOAA status report, 21 percent of fisheries are overfished (low abundance), while overfishing (high harvest rates) is still occurring in 12 percent of U.S. fisheries. These encouraging biological signs arise directly from the most recent reauthorizations of the Magnuson-Stevens Act, which requires strict rebuilding time periods for overfished stocks. However, in some fisheries these regulations have resulted in substantial economic hardship and social change.

West Coast status and trends

On the West Coast, the biological status of fisheries managed by the Pacific Council is better still. Only 11 percent of assessed stocks are currently overfished, while overfishing is occurring in none of 32 assessed stocks. More than 90 species of groundfish are managed by the Pacific Council, but fishing regulations are driven by eight species that are under rebuilding plans (four are still overfished): seven species of long-lived rockfish, and one flatfish, petrale sole. A full suite of regulations has been imposed to rebuild these species including closing the formerly most productive fishing areas, gear restrictions, vessel buybacks, highly restrictive annual catch limits, and most recently, catch shares.

Under catch shares, each individual is allocated quota for every species, and can trade or lease that quota to others in the fishery. In the West Coast groundfish fishery, catch shares also include 100 percent on-board observer coverage and 100 percent monitoring of landings. The rationale behind catch shares is to allow maximum fishing flexibility, allow year-round fishing, and provide strong individual incentives to avoid overfished species. Early indications are that discards have declined for most species, revenues have increased from \$38 million to \$54 million, and catches are greatly reduced for the overfished species. One of the key issues in the fishery is the legitimate fear of a "disaster tow", where a single large catch would put an individual out of business. In particular, the quota for both yelloweye rockfish and for cowcod is just 2,205 pounds, implying that each vessel is allocated about 20 pounds of yelloweye and cowcod for the whole year. If these quotas are exceeded, pounds must be bought or leased from others before they can continue fishing. Staying with these limits seemed unlikely, yet remarkably, the fleet only caught 6 percent of the yelloweye rockfish and 22 percent of the cowcod in 2013.

Overfishing, underfishing and "weakest-link" management

In the groundfish fishery, management has successfully focused on ending overfishing, and on rebuilding overfished stocks. The net result, however, is that rebuilding the weakest links in the fishery has led to substantial under-catching of the total allowable catches (TACs). Out of 26 stocks under catch shares, catches are within 10 percent of TACs for only three species: sablefish, Pacific whiting, and petrale sole; while for 11 stocks, catches are less than 20 percent of their respective TACs. For the average stock under catch shares, only 27 percent of the TAC is caught.

Therefore, although average biomass is rebuilding rapidly, and is on average above maximum sustainable levels, harvest rates are just 1 percent of the available biomass.³ This is a much lower harvest rate than in almost any other fishery in the world. Our previous calculations suggest that catch lost due to overfishing amounts to about 3 percent of total sustainable yield, while lost yield from under-catching TACs amounts to about 30 percent of total sustainable yield.³

For this fishery, focus on rebuilding the eight overfished species has been biologically successful: rebuilding is underway, but will take many years because most

¹ FAO. *The state of world fisheries and aquaculture 2012*. (Food and Agriculture Organization of the United Nations, 2012).

² Branch, T. A., Jensen, O. P., Ricard, D., Ye, Y. & Hilborn, R. Contrasting global trends in marine fishery status obtained from catches and from stock assessments. *Cons. Biol.* 25, 777–786 (2011).

³ Hilborn, R., Stewart, I. J., Branch, T. A. & Jensen, O. P. Defining trade-offs among conservation, profitability, and food security in the California Current bottom-trawl fishery. *Cons. Biol.* 26, 257–266 (2012).

of these species are extremely long-lived and slow-growing species. The tradeoff of meeting these biological targets is substantial lost revenues and profits.

The key take-home message is that *greater flexibility in mandatory rebuilding timelines* and rebuilding rates would allow for greater profits in this fishery, while overall harvest rates would still remain low.

Effects of catch-shares

Catch shares have already had a major impact on all aspects of the West Coast groundfish fishery. Discards have declined, catches are a smaller fraction of TACs, fleet sizes are likely to shrink, and profits have increased. Most of the major issues are likely to involve questions of fairness, equitability, and control. Based on many other catch share fisheries, the relative balance of power will shift towards quota owners, and away from processors, deckhands, and coastal communities. In addition, the original recipients of quota shares will benefit far more than those who buy in at a later stage.

It is inevitable that allocation issues will arise among different sectors: trawlers, fixed-gear fishers, recreational fishers, charter boats, and tribal groups. One benefit of catch shares is that they provide a market-based method of shifting quota among these groups, that should be allowed in the reauthorization of the Magnuson-Stevens Act. For example, charter boats might be willing to pay handsomely to buy quota from commercial fishers, in order to increase bag limits and fishing experiences for their clients.

Therefore, in revising the Act, consideration should be given to *whether leases and sales of quota should be allowed among commercial, recreational, charter boats, and tribal groups*.

Academic training

The 2006 Magnuson-Stevens Act requires Councils to specify annual catch limits for all managed fisheries. This has led to an increased demand for trained stock assessment scientists to conduct these basic assessments. In 2009 it was estimated that NMFS employs about 90 stock assessment scientists, but given retirements and anticipated future needs, 135–146 new hires would be needed in this field within 10 years.⁴ As a result, a number of new academic posts, including my own, were created to train more PhD-level graduates. Together with my colleagues at the School of Aquatic and Fishery Sciences, we teach a sequence of seven courses aimed at training graduate students in the programming, statistical, and modeling skills required to conduct stock assessments.

However, funding for graduate students has lagged behind. The NMFS-Sea Grant fellowship program in Population and Ecosystem Dynamics funds only 2–4 students a year, and with rising tuition costs, now covers less than half of a typical four-year PhD program. In addition, academics working on relevant fisheries research rarely receive funding from the National Science Foundation (NSF), which is not allowed to overlap NOAA's mission. There used to be a joint NOAA–NSF program that funded fisheries research, and was highly successful, but this program (the Comparative Analysis of Marine Ecosystem Organization, or CAMEO) fell victim to budget delays.

This reauthorization of the Magnuson-Stevens Act should include *dedicated funds for graduate students through Sea Grant, NOAA and NSF to train and hire a new generation of stock assessment scientists* to meet NOAA's current and anticipated needs.

Data requirements

A key requirement for management of these fisheries is a long time series of fisheries-independent data. Without regular (annual) fisheries-independent surveys, stock assessments will be inaccurate and imprecise, and the science available will not be the best possible available science. *Of crucial importance is the continuation of the annual bottom trawl survey* and other surveys such as pot surveys or hook-and-line surveys that are able to sample fish in the rocky habitats that are inaccessible to the bottom trawl survey.

Summary

Compared to the world as a whole, and the rest of the U.S., fisheries managed by the Pacific Council are in better biological shape and are lightly fished. However, rebuilding plans for eight species seriously constrain catches of other species in the region, resulting in substantial lost revenue. Increased flexibility is needed in rebuilding times and in quota transfers if economics and social impacts are to be re-

⁴Berkson, J. *et al.* Is there a shortage of fisheries stock assessment scientists? *Fisheries* 34(5), 217–219 (2009).

duced. Of critical importance is continued funding for fishery-independent surveys producing the key data underlying management decisions, and increased funding to train stock assessment scientists to meet NOAA's needs.

Senator BEGICH. Thank you very much.

And again, to my colleagues, the vote has started but we'll have time for both of you to do your questions. I'll submit mine for the record. I actually have some additional ones now that you've made some interesting comments; all of these.

So let me pause and Senator Schatz and then Senator Cantwell.

Senator SCHATZ. Thank you, Chair Begich.

And I'll submit some additional questions for the record.

But my very quick question for Mr. Goto is, could you just explain on the ground what pirate fishing means to you at the fish auction and what the real economic impacts are?

As quickly as you can since we're having a vote.

Before you get started, I just wanted to announce that we've found his coat.

Senator BEGICH. Oh, good.

And just so you know, Senator Schatz, each of you can take your 5 minutes because then we'll be able to tag the vote on the back end.

Senator SCHATZ. OK.

Senator BEGICH. But I'm glad he found his coat.

Mr. GOTO. Yes. Now I can fly home and watch Peyton Manning win the Super Bowl. I'm just kidding.

[Laughter.]

Mr. GOTO. I'm the most unpopular person in the room now.

Senator, to address your question, IUU, we don't see it directly ourselves but the impacts of it are very substantial. The only real competition that any domestic fishery has is with imported product. And to really show how that affects the domestic market, we see fluctuations in price especially in our system of sales. We do an auction system so that the market basically flows as the demand flows.

Hawaii-caught tuna and all seafood has developed a very good reputation across the globe and it's very popular. And it really does compete with cheaper, I'll say, unsustainably caught product because, despite the fact that you may know the origins of it, you don't have any indicators of how it was caught or the impacts that were taken because of it.

So not only are those the issues, but it really does affect the value of our fish. If we do have a lot coming in at a certain time, it will really cause the market to dip and, you know, fishermen expenses are very high as I brought up within my testimony. Fuel prices are through the roof. You think when you go to the gas pump to fill up your car it's expensive. Imagine filling up a 75 foot boat. It's really expensive just to get that and then there are crew transport issues, regulatory issues, you know, it really adds up.

So to produce food, we all think food comes from farms and ocean, but we don't really think about the sustain costs of it. And to, like I said, to project that down the line, if the fishery is going to lose money, or the vessels are going to lose money, it's a disaster in the end for them. They can't keep on going; they can't keep on

producing in light of, like I said, the unsustainable product that's being brought in.

So, to answer your question, Senator. Thank you.

Senator SCHATZ. Thank you very much.

Thank you, Chairman.

Senator BEGICH. Senator Cantwell.

Senator CANTWELL. Thank you, again, Mr. Chairman, for this important hearing.

And I just wanted to say to Mr. Goto that the Chairman of this committee is making a name for himself here; making sure that our colleagues, when it comes to disaster relief or whatever, to understand that you can't just aid the food product that grows out of the ground and ignore the catastrophes we have in the oceans. So I want to thank him for continuing to educate my colleagues on that and on "Frankenfish." So he has done a good job on both of those issues.

Dr. Branch, talk about the finfish, salmon and whiting as it relates to ocean acidification. What are the impacts? What are the concerns?

I know you gave a representation of how we're doing on the Pacific Council and where we are juxtaposed to the rest of the world, but don't we have a looming issue here with acidification and some of the things that were cited in the previous, Mr. Stelle's comments, about the near shore issue?

Dr. BRANCH. Yes.

For ocean acidification, I think there are still some unknown questions. I've been told the last five or ten years it was thought that fish wouldn't be affected at all by ocean acidification. It would mainly be bivalves, mollusks, clams, and oysters and so on; which have already been affected on the West Coast. But then, some people have been doing research on clownfish, of all things, the "Nemos" of the ocean and showing that if you give them a choice between two sides of an experimental aquarium, one side containing the smell of a predator and the other side containing just seawater. Usually, they will avoid the side with the predator smell, but if you put them in slightly acidified water, about what you'd get before the turn of the century, they will choose the side with the predator smell in preference. They actually think it's an interesting smell to go to explore, they get bolder and less cautious. And if you take these same juvenile clownfish and put them out in the coral reef, it turns out they get eaten about ten times more often than ones in regular seawater.

So this is something where, if this is true, not only of clownfish and other tropical reef fish, but also of our fish on the West Coast, this could be a big issue. And I think we need to find out if that is true or not.

Senator CANTWELL. And how can we leverage the acidification research?

How can NOAA leverage what's being done in the University of Washington Center on acidification now?

How can we work cooperatively? Because, we meet fishermen all throughout our region that are ready to help participate in collecting data and information.

Dr. BRANCH. I think the key, I mean, the new center at the University of Washington, thanks very much to funding for that, I think is going to be a key part of figuring out what species are going to be affected and what species aren't and how to cope with ocean acidification in the future and hopefully mitigate against the causes of ocean acidification as well.

Senator CANTWELL. Do we have the science that we need, Mr. Dazey?

Mr. DAZEY. I don't know if we have enough science or not.

There has been a lot of research done on ocean acidification by Dr. Feely and some of Dr. Branch's associates at the University of Washington. One of the things that concerns the salmon fleet is that ocean acidification will affect copepods. And that's a large part of the diet of juvenile salmon.

Senator CANTWELL. So you're talking about a shellfish that they feed on being affected just as the shellfish industry has been affected.

Dr. DAZEY. That is correct.

Senator CANTWELL. Which was a very big threat and only data and information got us, through this buoy system, the right kind of information to help in that seeding process.

So, I mean, what would we do here if it's such a big food source for salmon?

Dr. DAZEY. That's correct.

Copepods are a huge resource for salmon. One of the possibilities in doing the at-sea collection of GSI samples is collecting things like ocean acidity or temperatures; other things beyond just the tissue sample from the fish. That, of course, requires more effort from the fishermen and takes time away from his primary business of catching fish.

Senator CANTWELL. Well, the reason I bring this up is because throughout this hearing we've had a lot of dialogue about all the things we're doing to try to protect salmon. And yet, I think we also have to realize that there is this larger looming threat of acidification. And so, while we've all been aware that this is accelerating, or having an impact on the oceans, I think this one is a very big potential.

I'm just going to ask Mr. Toste about the, you know, the access question about young fishermen and what we need to do to continue to make sure that they have access.

Mr. TOSTE. In Washington State, in the crab fishery, Phil Anderson, the Director and I, got our heads together a couple of years ago and we enacted a two-part bill to the Legislature. And it was on the transfer of crab permits. I think, if you're a young man and you got a boat that you're trolling with, the investment of crab gear is huge. The investment of crab gear and a permit may make it impossible. I think if there's some way to fund, help fund permits.

Now, in Alaska you have a banking system that does just that. At one time, in Alaska, the permits couldn't even be taken by the IRS or in the case of a divorce.

[Laughter.]

Mr. TOSTE. So a lot of guys were buying crab permits. The State of Alaska brought that to an end in a hurry.

But what we did is we made the license transferable every 365 days. And the permit, if I'm selling this fellow my permit, say for \$50,000 and he gives me five down and he's going to pay me over the next 10 years, I hold the permit in my name. He simply has an additional operator's license. So that way I can finance that permit as I sell out which, when you get my age, selling them out over a period of time is inviting. For the young man getting in, it's inviting. It has kind of helped there. I know it has worked there on crab. But not a lot of the other states do that. California is nearly impossible to buy into. And I think bankers, if they knew that they could use a permit as collateral, would be an enormous help to getting people in.

Senator CANTWELL. Thank you.

And, you know, my colleague and I, Senator Begich, had a listening session in Seattle. And it's very clear there are many aspects of the fishing industry, whether it's the permit issue or vessel issue, that our friends in the banking industry don't understand. And yet, they are very solid, you know, managed resources. So it's very predictable from that perspective.

So anyway, again, thank you, Mr. Chairman, for all your indulgence on this very important issue not only just to our region but to our whole nation. I really appreciate your leadership on it.

Senator BEGICH. Thank you very much, Senator Cantwell. And thank you all for being here.

And let me say this and this is a comment I use a lot, and that is, you know we're about to, probably Monday, Tuesday, vote on a farm bill and move forward. And as I like to say if you can imagine that farm bill called "the fish bill," all those programs that are in there, the value of that and what it would be. And I always say the only difference is we harvest from the sea verses the land, but it's a food product that is utilized not only for consumption, Hawaii is a great example, triple consumption, but also it's an export product for us around the world.

So we hope, and that's our effort, to create equity when they talk about the farm bill, we'd like to see a fish bill of equal qualities. So that's the long-term.

But we really thank you all for being here today. I will keep the record open for 2 weeks. I will submit my questions. We do have a vote that closes in just a couple minutes.

But again, thank you all very much for participating.

At this time, we'll adjourn the meeting.

Thank you.

[Whereupon, at 11:33 a.m., the hearing was adjourned.]

A P P E N D I X

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARCO RUBIO TO WILL STELLE

Question 1. Under a typical LAPP program, how would a new market entrant participate in the fishery?

Answer. Limited access privilege programs (LAPP) have been implemented throughout the country and have a variety of approaches to new entrants. Generally, a new entrant to a LAPP fishery would need to purchase a permit from a current fisherman in the fishery. The permit typically has an amount of quota share—the percent of the annual catch limit the individual can harvest—associated with it. The new entrant would then be able to fish for that amount of quota and have the ability to lease or purchase additional quota from other fishermen.

Other approaches, such as in the North Pacific, allow crew members to hold or lease quota, which they can fish to generate capital to purchase a permit, vessel, or additional quota. In another example, the Pacific Trawl Rationalization Program included an Adaptive Management Program that sets aside a specific amount of quota to be used to support new entrants and fishing communities' participation in the fishery.

The Magnuson-Stevens Act includes LAPP provisions which allow Regional Fishery Management Councils to request implementation of a loan program to support participation of small scale fishermen and new entrants. To date, the North Pacific and Gulf of Mexico Councils have taken advantage of this option for their crab and red snapper programs, respectively.

Question 2. Which of your Fishery Ecosystem Plans have resulted in an increased catch quota for the participating fishermen?

Answer. The Pacific, Western Pacific, South Atlantic, Mid-Atlantic and North Pacific Fishery Management Councils all have fishery ecosystem plans, but they have quite different objectives. The Pacific Coast Fishery Ecosystem Plan for Federal waters off Washington, Oregon, and California is a coastwide policy planning tool. It details the Pacific Fishery Management Council's ecosystem-wide objectives for better understanding the status and functions of the U.S. portion of the California Current Large Marine Ecosystem. The Pacific Coast Fishery Ecosystem Plan is intended to improve Council decisions across fisheries by providing the Council and the public with more and better information about the interactions that marine species have with their environment, and that fisheries have with each other and with the marine ecosystem. This Fishery Ecosystem Plan also articulates the Council's broad policy priorities for marine resource management within the U.S. West Coast Exclusive Economic Zone, so that other agencies and policy processes may better account for the effects of their actions on the marine environment.

The Western Pacific Fishery Management Council reorganized its fishery management plans in 2010, referring to them as Fishery Ecosystem Plans for 5 island areas. In contrast to the Pacific Coast Fishery Ecosystem Plan, the Western Pacific Fishery Ecosystem Plans are the fishery management plans under which all Magnuson-Stevens Act management, including annual catch limits, is implemented. The Western Pacific Fishery Ecosystem Plans reorganized, but did not significantly change, the implementing regulations for Western Pacific fisheries.

The South Atlantic Fishery Management Council developed a Fishery Ecosystem Plan in 2009, which organizes information on the habitat and biology of species, fishery information, social and economic impacts of management and ecological consequences of conservation and management, into a reference document that will be used when developing fishery management plan amendments and regulations.

The North Pacific Fishery Management Council developed an Aleutian Islands Fishery Ecosystem Plan in 2007 as a high level compendium of information—not directly impacting management. The goal of that Fishery Ecosystem Plan is to provide enhanced scientific information and measurable indicators to evaluate and promote

ecosystem health, sustainable fisheries, and vibrant communities in the Aleutian Islands region.

The Mid-Atlantic Fishery Management Council is currently developing an Ecosystem Approach to Fisheries Management (EAFM) Guidance Document. Rather than drastically change the Council's management approach, the final product will serve as a non-regulatory umbrella document to guide policy decisions as the Council transitions from single-species management toward an ecosystem-based approach.

In the short term, we cannot attribute changes in catch levels, either up or down, in these fisheries specifically to ecosystem-based provisions of these Fishery Ecosystem Plans. However, the Councils expect that in the long term, ecosystem considerations will result in improved management and sustainability of the fisheries.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. MARCO RUBIO TO
DR. DONALD MCISAAC

Question. Under current implementation of MSA, we put a lot of emphasis on conservation. Do you think we need to put more emphasis on the socioeconomic factors of fishery management?

Answer. The Pacific Council strongly believes fish conservation should trump immediate economic yield when stock productivity is at stake. However, we also believe more emphasis on socio-economic information can improve the quality of fishery management decision-making, and there are a number of ways that more emphasis could be placed on socioeconomic factors. To this end, there are needs for more policy flexibility around annual catch limits and rebuilding time frames to allow the Councils and National Marine Fisheries Service (NMFS) to take socioeconomic considerations into account (and in some cases even further improve conservation); more governmental resources to implement policies already adopted by the Council to improve socio-economic benefits from the fishery; and the ability to access and publicly release port and fishery level information in order to properly take into account social and economic factors in decision and management processes.

The Council needs greater policy flexibility to take into account the needs of human systems while at the same time being responsible to conservation mandates. Even within a biologically stable fishery, the range of natural fluctuations present problems with respect to the needs of fishery-dependent human communities for stability and the generally low tolerance of human communities to economic fluctuation. Therefore, flexible policies are needed which allow for more consistency of harvest than would be commensurate with natural stock fluctuations while at the same time assuring long-term sustainability of the resource. Rigid specification and interpretation of annual catch limits and rebuilding policies present challenges in this regard. For example, for the West Coast trawl rationalization program, interpretation of annual catch limits has prevented implementation of an annual individual quota surplus carryover provision, even though the Council's Scientific and Statistical Committee has determined that such a provision would have no detrimental effect on the affected stocks. The carryover policy allows unused quota from one year to be carried over into the next. Leaving fish in the water for an extra year would actually have a conservation benefit, but current rigid interpretation of MSA language regarding annual limits prevents implementation of the policy. Consequently, the incentive is to harvest as much of the current year quota as possible to the point of risking exceeding the current year limits.

Another example of a limit on the policy flexibility that Councils have to take into consideration socio-economic information is provided by the language in Section 304(e)(4)(a) of the MSA, regarding rebuilding an overfished species. When strictly interpreted, the language creates a potentially untenable situation on two counts. On the first count, it requires that policy be designed to achieve rebuilding within a time period "as short as possible." While the section continues with language acknowledging the need to take into account the needs of fishing communities, the practical sensibility which Councils believe was intended by Congress has been interpreted by the Courts as nearly ignoring the needs of fishing communities until such time as they are in a disastrous state. Current administration of this requirement necessarily leads to large reductions in catch of directed fishery stocks that are being rebuilt, and can restrict mixed-stock fisheries when the rebuilding stock coexists with healthy stocks. Even a clear demonstration of disaster-level consequences has not led NMFS to adequately exercise the room for discretion Congress provided in this area. For example, for the 2011–2012 groundfish fishery, on a 12–0 vote (with one abstention) the Council recommended biologically precautionary rebuilding annual catch limits (ACLs) for yelloweye rockfish and cowcod

that would have provided some alleviation for economic activity levels that were below those previously associated with a federally-declared disaster. Despite a policy that was successfully rebuilding the stocks and a recommendation that provided substantial economic relief through only a few tons of additional harvest and virtually no appreciable impact on decades-long rebuilding schedules, NMFS refused to implement this unanimous recommendation, opting instead for ACLs that were slightly lower but accompanying management measures that entailed greater risk of exceeding the ACLs than the Council's recommendations.

The oft-cited purpose of an "as short as possible" rebuilding schedule is the anticipation of the compensating economic benefits that will become available when a stock is rebuilt. For situations in which the stock to be rebuilt has low productivity and is taken in a mixed-stock fishery (*i.e.*, constraining the harvest of more highly productive healthy stocks), it may well be that there will never be a sufficient jump in production to compensate for the upfront severe harvest reductions needed to achieve the rapid rebuilding policy objective. Under such circumstances, so long as a stock is not listed as threatened or endangered under the Endangered Species Act and is on a reasonable rebuilding trend, there does not appear to be either a biological or economic reason that rebuilding should be achieved within a time period "as short as possible." The occurrences of such exceptions should be rare, but where they are so justified, the law should have flexibility adequate to allow for rational management of the fisheries.

It is important to note that the purpose rebuilding programs are designed for is to increase stock sizes to provide for biological stability and the attendant future economic benefits to the same fishery-dependent communities negatively impacted (potentially to levels of an economic disaster, *e.g.*, Pacific Coast groundfish in 2000) by the rebuilding program. It has been said that a solution may be as simple as changing the word "possible" to "practical." At any rate, there is a need for a threshold clarification that would allow Councils to properly take into account important social and economic impacts to communities when reducing catches in a rational stock rebuilding plan.

On the second count, 304(e)(4)(a)(ii) creates a knife edge criteria for rebuilding timeframes which, under certain circumstances, eliminates any flexibility for the consideration of socio-economic factors. While a strict 10-year rebuilding requirement is appropriate in some situations, focusing on rebuilding in a certain amount of time using this approach can also result in overly-restrictive fishery management that is illogically and unnecessarily harmful to fishermen and fishing communities. It is apparent that more flexibility is needed to optimize multiple goals. The 10-year rule, where stock rebuilding must occur within 10 years if possible, can lead to an unsound, discontinuous policy that can grossly disrupt fisheries for little conservation gain. If a stock can rebuild in 10 years at a cost of closing all fisheries, this becomes a mandate with no leeway for socio-economic considerations. Paradoxically, the requirements for rebuilding a fish stock in worse condition, *e.g.*, one that requires 11 or more years to rebuild with no fishing, provides for more than 11 years to rebuild (11 years plus the length of one generation of the species), with obviously less economic disruption. This is illogical and potentially disastrous for some fishing-dependent communities.

The second issue of concern related to taking socio-economic considerations into account is a lack of governmental resources—consideration of socio-economic factors is being thwarted by budget cutbacks. From a management cost perspective, a low-cost way to manage the fishery is to meet the biological objectives of the national standards using variations of the harvest regulations from past seasons. This is done annually or biannually when catch limits are set for each of the Council-managed fisheries. The greatest opportunity for considering socio-economic information in a meaningful fashion comes with respect to innovations in the harvest regulations through which the catch limits are achieved. The process of making innovative regulatory adjustments is being hampered by NMFS funding shortfalls. As an example, the Council has taken its final action on numerous issues intended to enhance benefits from the trawl rationalization program, but implementation of these actions has been delayed a year or more due to personnel shortages within the NMFS regions (in at least two cases delays have been more than two years). The current implementation backlog is down to four items, however, Council deliberations on other measures to take into account socioeconomic information and enhance benefits from the rationalized trawl fishery have been delayed for nearly a year due to the inability of NMFS staff to provide support.

One of the challenges that has created lengthy implementation lags has been the inability of NMFS staff to fully participate during the policy development process in the Council arena due to travel restrictions and excessive workload. Limited NMFS participation as led to more extensive and time-consuming staff consultations

later in the process, and, in some cases, even to Council reconsideration of an action, resulting only in a reaffirmation of its previous action. In June 2014, the Council is scheduled to begin scoping new management regulations to enhance benefits achieved for all sectors of the groundfish fishery. It is the Council's understanding that NMFS participation at this and following meetings is likely to be limited due to travel restrictions related to budget cuts.

Ironically, the lack of funds for full NMFS participation and support of the Council process not only slows and makes Federal fishery management processes more inefficient but at the same time contributes to diminishment of the higher levels of fishery-related socio-economic benefits which would otherwise be within reach.

The third limitation on consideration of socio-economic factors is confidentiality constraints. The protection of confidentiality for sensitive information is of serious concern to the Council and its constituents, as well as agency and Council staff. At the same time, there is a public interest in knowing total harvest and landings for a particular port or region—as indicated, for example, by MSA mandates to consider port dependence. In today's global economy, circumstances arise where the competitive market has allowed nearly all of the substantial fish buying and processing, and in some cases harvesting, in a particular port to occur through a single company. In a few instances in the past, situations have arisen where a single processing company was the only one active in a fishery, creating confidentiality problems around public release of information regarding how many fish remained to be harvested prior to closure of the fishery. Confidentiality concerns may also arise where there is a single harvesting co-op for a sector (*e.g.*, the West Coast at-sea mothership and catcher-processor co-ops). In order to appropriately manage the fishery and take socio-economic factors into account, the government needs to be able to release the following information types of information: total volume (weight) catch/discards/landings of a species or stock caught in a particular fishery, total volume (weight) catch/discards/landings of a species or stock caught by a particular sector, total volume (weight) of a species or stock landed at a particular port, and economic activity impact estimates for a community based on landings of a species or stock at a particular port.

The confidentiality concerns with most of these statistics occur when there is only one significant processor/buyer in a port. For processors, ex-processor prices and product recovery rates are generally considered to be the most sensitive processor information. The information releases identified here would not lead to divulgence of such information.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARCO RUBIO TO
ARNOLD PALACIOS

Question 1. Are you concerned that the pending determination before NOAA of corals under the Endangered Species Act may further limit fishing, both commercial and recreational, in your region?

Answer. The Council is greatly concerned about the pending ESA determination of corals. It cannot be emphasized strongly enough that a broad scale listing of 66 species as proposed by NMFS would be an unmitigated disaster. Most of these coral species proposed for listing are not rare or even under threat. There is thus no logical reason to ESA list all these species.

Experience to date in the Gulf of Mexico and Caribbean has shown that even the listing of a few coral species can have significant effects on fishing and other human activities such as construction.

The ESA brings with it a significant load of statutory baggage including listing critical habitat and acceptable take limits. These can and will be used to limit fishing on coral reefs as there are many environmental NGOs which have a zero-tolerance policy towards fishing, especially on coral reefs. Listing so many species needlessly under the ESA provides the perfect opportunity to seek fishing bans on coral reefs. Such bans would not just be sought for Federal waters but also for state and territorial waters since the ESA applies across the species range, and without regard for state/federal jurisdiction.

Further, the impacts of fishing to corals may be both direct and indirect. Some fishing gears such as nets and traps are set on or around corals and may cause limited localized damage to coral substrate. As such there may be attempts to limit these gear types even though there is little evidence that they are doing wide-scale harm to corals.

Fishing will capture both piscivorous and herbivorous fish, the latter of which may feed on algae growing on reefs. It might be argued that fishing on herbivores may lead to the proliferation of reef algae to the extent that it kills or limits coral

growth. As such, bans on herbivorous fish or gears that catch large volumes of herbivores may be sought if corals are ESA listed. We have already seen the glimmerings of this type of action in the Caribbean, where a law suit was brought against a coral biological opinion for not considering the impacts of a parrot fish fishery on the corals.

Question 2. Are the ten-year rebuilding timelines mandated in the last MSA reauthorization working for your Councils and the stocks you manage? Would it make sense to give your Council some reasonable latitude to deal with rebuilding stocks for which this ten year time-frame simply doesn't make sense?

Answer. The ten-year rebuilding timelines have not proven to be an issue with this Council. Only one non-pelagic fish stock has been evaluated as overfished (pelagic armorhead) and the only habitat where this species can be caught (Hancock Seamount) is subject to an ongoing fishing moratorium now in its 28th year.

Pelagic species which are overfished such as Pacific bluefin tuna and North Pacific striped marlin are subject to the international exception under the MSA, as these stocks are managed under international fishery management arrangements promulgated by two Pacific tuna regional fishery management organizations. Management measures have been developed for these species, as well as for species such as Western and Central Pacific bigeye which is subject to overfishing but not yet overfished.

Question 3. Under current implementation of MSA, we put a lot of emphasis on conservation. Do you think we need to put more emphasis on the socioeconomic factors of fishery management?

Answer. Over the past 20 years, the emphasis of the MSA has been very much oriented towards conservation and stock recovery. The social and economic impacts of fishery management measures to reduce overfishing or recover overfished stocks have been secondary to stock recovery. Unfortunately, net result has been the reduction in U.S. domestic fisheries production, where we as a nation now produce less than 10 percent of the seafood consumed in the United States.

As management to recover stocks has led to the marginalization of more fishermen we are importing fish and seafood from many countries with much less stringent fishery management. This has been dubbed the "Viking" approach to conservation, *i.e.*, careful husbandry at home versus rape and pillage abroad.

The loss or downsizing of fisheries may also carry other costs which have yet to be determined. There are many fishermen that elect to fish primarily as a lifestyle choice versus maximizing incomes. What happens to these individuals when regulations marginalize the less productive fishermen from making a living? These are the kinds of socio-economic issues which need to be examined in depth along with the conservation benefits to stocks from management measures.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. MARCO RUBIO TO
JOE DAZEY

Question. Do you think the agency is putting enough emphasis on collaborative research?

Answer. While NOAA has scientists on its staff, I think it fails to utilize the potential assistance it could get from the fishing fleet, both recreational and commercial. The West Coast Genetic Stock Identification Collaboration has had funds allocated in the President's budget that has not survived the congressional budget process. NOAA has not given this project sufficient priority within its own budget to enable long-term (more than one year) planning. This project needs data collection over several generations of salmon in order to adequately document distributions of salmon, including endangered stocks, over time and space. There is potential to manage salmon stocks in a manner that reduces pressure on endangered stock while allowing increased harvest on strong stock.

This is one example of an effort on the West Coast. The fishing fleet has been helpful in cleaning up oil spills in the Gulf of Mexico and the Gulf of Alaska. It has the ability to assist in scientific efforts (monitoring recovery of shellfish in the Gulf of Mexico, *e.g.*) as well. Data points such as acidity and dissolved oxygen would be useful to scientists and obtainable by the fleet.

Thank you for the opportunity to comment.