

**SOUTHEAST REGIONAL 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

FIRST SESSION

NOVEMBER 14, 2013

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ONE HUNDRED THIRTEENTH CONGRESS

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SOUTHEAST REGIONAL PERSPECTIVES ON MAGNUSON-STEVENSON ACT REAUTHORIZATION

THURSDAY, NOVEMBER 14, 2013

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 10:37 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. This is the U.S. Senate Commerce Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard. This is the Southeast Regional Perspectives on Magnuson-Stevens Act reauthorization. We thank you all for being here. We thank the panel as well as others that are going to testify shortly.

Again, welcome to all our witnesses and other guests in the hearing of the Senate Commerce Committee on Oceans, Atmosphere, Fisheries, and Coast Guard. This hearing marks the second in a series of hearings we are holding on the reauthorization of the Magnuson-Stevens Fisheries Conservation and Management Act.

The Magnuson-Stevens Act, or otherwise known as the MSA, named after two forward-thinking members of this committee, provides the architectural framework for the conservation and management of our Nation's fisheries. MSA was last reauthorized in 2006, at which time significant improvements were made, most notably the requirement that fisheries 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 fishing levels recommended to the councils by their scientific and statistical committees. The revisions also provided fishermen and the councils with new management tools to rationalize fisheries if they wished to do so.

These reforms, combined with rebuilding plan requirements added to the Act in 1996, put us on a firm footing for the sustainable management of our fisheries and our fisheries resources. Many now even 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 MSA aimed at improving the accuracy and reliability of data on the recreational fishing activities so we can better manage fisheries that support charter and private recreational fishing as well as commercial fishing. This includes the authorization of the new Marine Recreational Information Program and the National Salt Water Angler Registry.

That said, implementing these reforms has not been easy. This comes as no surprise because fish issues have never been easy. Our challenge today is how to properly balance the need for responsible stewardship of our fisheries for future generations with the needs 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 Southeast regional perspective, specifically addressing management issues in the South Atlantic, the Caribbean, and the Gulf of Mexico.

We hope to learn more about the impacts MSA is having on this region's important fisheries and individuals, businesses, and communities who depend upon them and how, if at all, the Act can be modified or improved. I look forward to hearing from our witnesses today on how these and other changes and updates to MSA are being implemented and what effects they're having.

Before we start, I know Senator Rubio, the Ranking Member, is on his way, so we will continue the meeting, but I'd like to see if Senator Nelson has some opening comments, and then we'll go right to the panel until Senator Rubio attends.

**STATEMENT OF HON. BILL NELSON,
U.S. SENATOR FROM FLORIDA**

Senator NELSON. Senator Rubio is giving a speech on the floor, so I would ask consent that his remarks be entered in the record, and then he can be addressed whenever he gets here.

Senator BEGICH. Without objection.

Senator NELSON. And I want to thank you for having this hearing as it examines the concerns of fishing and conservation interests in the southeastern U.S. Over and over since I've been in the Senate, I have been asking this full committee and the Subcommittee, asking the leaders of NOAA and the National Marine Fisheries for a full-blown benchmark stock assessment for the managed species in the Gulf and in the South Atlantic. Naturally, I'm very pleased that now in 2013 NMFS and the Southeast regions have completed a benchmark assessment for Gulf red snapper for the first time since 2009.

Recreational, charter, and commercial sector fishermen all reap the rewards of the best science, and that science then translates into an acceptable catch. Bottom line: better science means more days on the water. So when we were doing the RESTORE Act, where was the money going to go once the court decides in New Orleans what the fine is for BP? Naturally, I wanted a specific source of funding coming from the RESTORE Act to go for data collection for the Gulf. Budgets are tight and the RESTORE Act is going to be able to have a dedicated source of funding coming for that.

As we are reviewing these items in the Magnuson-Stevens, I recommend, Mr. Chairman, that we do not take our eyes off the importance of good science. And I look forward to the hearing today. Senator Rubio, I've already spoken for you.

[Laughter.]

Senator NELSON. And I've already inserted your comments in the record.

Senator BEGICH. There we go. Thank you, Senator Nelson.

He has spoken about the health of fish, which is important. We thank you.

Senator Rubio, Ranking Member, we'll go ahead and go to your opening statement.

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

Senator RUBIO. Well, thank you. All kidding aside, one of the great advantages in Florida we have is a pretty good partnership between Senator Nelson and myself, especially on issues like this—it's hard to be partisan about fishing and the health of our oceans.

So thank you so much for the opportunity. Thank you, Chairman, for holding this hearing. This is the second in our regional hearings that we're doing that I hope guide members of the Subcommittee as you work toward reauthorizing the Magnuson-Stevens Act. I have to admit that I think this hearing's my favorite.

Anyway, I'd like to welcome Dr. Crabtree and the Council Chairman for being here. I'm thankful in particular for several witnesses that will be on the second panel who have traveled up from Florida to be with us today: Commissioner Windes, Captain Johnson, Captain Tucker, and John Brownlee. Thank you for being here today to share Florida's experience under the Act.

Let me just say at the outset that I may have to leave for a few minutes because I have a bill up before Foreign Relations, but I plan to return if that finishes in time.

Let me go on to say, Mr. Chairman, that I know that I benefit from reading the testimonies of all of you that are here today, and I greatly appreciate the opportunity to continue this dialogue with the three industries from Florida represented here today on the issues we need to address in the next reauthorization. Many of the issues raised in your testimony are issues that I've raised before in this subcommittee and so has Senator Nelson, issues such as the accurate and up to date data, up to date science, which is so fundamental to proper fishery management, and the need for greater flexibility in management that accounts for not only the economic costs of regulating an industry, but also the different ecosystems and the species that are federally managed.

These are both issues I raised at the first hearing we held and are issues I'm committed to addressing in the next reauthorization. However, each region has its own unique fisheries and its own unique set of issues. The Gulf of Mexico and the South Atlantic are no exception. I think the biggest takeaway from the testimony that you will give today is that Magnuson-Stevens as currently drafted simply does not work for the recreational fishing community. The Southeast Region, blessed with generally beautiful weather and several different stocks, probably has the largest recreational fish-

ing industry in the entire United States. In Florida saltwater fishing generates about \$7.1 billion and it supports thousands of jobs both directly and indirectly across the state.

Yet, faced with concerns over allocation and uncertainty in the seasons, in some cases in the South Atlantic no season at all, our recreational fishermen have lost any semblance of faith in the Federal management system. Their concerns are so wide-reaching that it's led some Members of Congress to introduce legislation that shifts management away from NOAA to the states and has even been recently vocalized by Senator Vitter's temporary hold on Dr. Sullivan's nomination.

So it's clear that the issues of the recreational community cannot be ignored in the next iteration of Magnuson-Stevens, and I'm committed to reforming the law so that it works for every fisherman in Florida and across the United States, the commercial fishermen, the recreational fishermen, and charter fishermen, all alike.

Finally, Mr. Chairman, I'd like to close by offering a few policy priorities that I'm examining and I would like to discuss in more detail during our question period if, God willing, I'm around. With regard to the science, we need to make sure that funding levels are adequate and we need to explore ways to make fishermen a larger part of data collection so what they see on the water is appropriately reflected in a fishery management plan.

Notably, the law calls for the "best available science," but, as we'll hear today, sometimes the science is simply not available. As we work to address this shortcoming, we should consider in these data-poor cases whether or not it is prudent to require annual catch limits for certain stocks.

We also need to look at the arbitrary ten-year rebuilding time line under the Act. Every council chair that has appeared before this subcommittee has stated that they need increased flexibility in rebuilding stocks. Their call was recently mirrored by a National Research Council study recommending alternative management strategies for rebuilding.

I think addressing flexibility in management should be a top priority in reauthorization. Also, we need to focus in particular on innovative ways not only to account for our recreational fishermen and their catch, but to do so in a way that provides a more consistent and longer season, both in the Gulf and in the South Atlantic.

Finally, we need to ensure that the economic well-being of commercial, recreational, and charter fishermen alike and the communities they support is prioritized among national standards that guide fishery management in the United States.

Mr. Chairman, if I had to name another state where the fishing industry is as important as it is in Florida, that state would be Alaska. I know that you are a strong advocate for the fishermen in your state. I think together we can work toward a reauthorization that reflects the several interests that have been and will be represented throughout these hearings and I'm confident that we can work together toward another bipartisan Magnuson-Stevens Act that will fit the needs of all.

So thank you for holding this hearing. As I said earlier, I may have to step away because I have a bill before Foreign Relations.

But I've read your testimony and I look forward to being back in time for the questions.

As I said, it may not be a perfect law, but it certainly has had some substantial success, and I look forward to perfecting it with you, Mr. Chairman. So thank you.

Senator BEGICH. Thank you very much. Thank you, Senator Rubio. And it is a great partnership when you think of Alaska and Florida. We may be literally across the country from each other; the issues that we face are pretty important with regards to our fish and how they impact us on an economic standpoint. So I'm looking forward to—and I do believe that this subcommittee has been known to bring the bills forward, as we did last year on Coast Guard, in a bipartisan approach with strong support. So I'm looking forward to this.

It's a little slower, to be frank with you, than the House because they've laid down a bill. But we're trying to take a much more methodical look at every issue before we put a piece of legislation down. So, Senator Rubio, thank you for you and your staff, for the work that you've been doing already.

Senator Scott, do you want to say any opening remarks before I go right to the members?

Senator SCOTT. No, go ahead.

Senator BEGICH. OK. Thank you very much. Thank you for attending.

What I'm going to do if that's okay, Dr. Crabtree, I'm going to go from this side down and, again, I'll introduce you as your time comes up for your presentation. Again, we have two panels today and the first panel—again, Dr. Crabtree is the Regional Administrator of the Southeast Regional Office, National Marine Fisheries Service, National Oceanic and Atmospheric Administration. This is why we always abbreviate everything on this end of the equation.

But we're very happy to have you here. So please, your testimony.

**STATEMENT OF DR. ROY E. CRABTREE, SOUTHEAST
REGIONAL ADMINISTRATOR FOR THE NATIONAL MARINE
FISHERIES SERVICE, NATIONAL OCEANOGRAPHIC AND
ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF
COMMERCE**

Dr. CRABTREE. Thank you. Good morning, Chairman Begich, Ranking Member Rubio, and members of the Committee. Thank you for the opportunity to testify before you today. My name is Roy Crabtree and I am the Southeast Regional Administrator for NOAA's National Marine Fisheries Service.

Fisheries such as snapper and grouper in the Southeast are vital to the prosperity and cultural identity of our coastal communities. They also play an enormous role in the economy. Recreational fishing is an important social activity for individuals, families, and communities and is a critical economic driver both locally and nationally. Commercial fishing supports fishermen and their communities and provides Americans with a sustainable, healthy food source.

Since its initial passage in 1976, the Magnuson-Stevens Act has charted a groundbreaking course for sustainable fisheries. Today

the law requires rebuilding plans for overfished stocks and annual catch limits and accountability measures to prevent overfishing. Ending overfishing and rebuilding depleted fisheries brings significant biological, economic, and social benefit. But doing so takes time, persistence, and sacrifice and adherence to scientific information.

While significant progress has been made since the last reauthorization, we recognize that this progress has not come without a cost and that challenges remain. Fishermen, fishing communities, and the councils have had to make difficult decisions and many areas have had to absorb the costs of conservation and investment in long-term sustainability.

In some cases, as with the Gulf of Mexico red snapper fishery, we have achieved biological success, but it has not led to the increased fishing opportunities that recreational fishermen value. In these cases, we need to address management challenges and explore new opportunities in a holistic, deliberative, and thoughtful way.

There are many examples of what fishermen, scientists, and managers can do by working together. In the Southeast Region, NOAA, the Gulf of Mexico, South Atlantic and Caribbean councils, the fishing industries, recreational anglers and other partners have successfully ended overfishing and rebuilt a number of stocks. We continue to see remarkable progress in rebuilding other stocks, including the Gulf of Mexico red snapper.

Both fishermen and scientists agree, and the most recent stock assessment confirms this, there are more red snapper in the Gulf of Mexico today than there has been in decades. This is because the rebuilding measures put in place for red snapper in 2007 are working. The stock is rapidly recovering and now supports the largest combined commercial and recreational catch quota ever specified. Commercial fishermen directly benefit by receiving additional pounds of quota. But recreational fishermen, who simply desire the opportunity to fish, have seen seasons grow shorter because they're able to reach their quota in fewer and fewer days. This has contributed to a very polarized atmosphere for dealing with issues of red snapper management.

However, there are innovative ideas currently under consideration that could provide relief. For example, all five Gulf Coast States have expressed support for moving to a regional management strategy. Such a system could provide States greater flexibility in tailoring management to meet constituent needs. The council is also considering reallocating red snapper catches between the commercial and recreational sectors and exploring other innovative approaches, such as inter-sector trading and establishing separate sub-quotas for for-hire and private boat fishermen.

NMFS fully supports the consideration of management options that have broad stakeholder support and provide the fishery greater stability while meeting conservation objectives. However, a lasting management strategy for red snapper in the Gulf, and indeed for all of our stocks, requires broad agreement, equitable application, and support at both State and Federal levels.

Another issue we face in the Southeast is the number of fisheries that are extremely data-limited. This makes it challenging to man-

age and monitor annual catch limits. A primary goal for the Southeast Region is to bring more stability to recreational fisheries and ensure the fishery managed response to recreational catch trims is appropriate.

A key component of our efforts to improve the ways—a key component will be our efforts to improve the ways we collect and use recreational catch data. We understand that we must continue to improve the quality and quantity of scientific data and that is why we so highly value the partnerships we have formed with the States, fishermen, and other interest groups. We'll continue to work with them and the council to achieve the best possible alignment of science and management for each fishery.

With some of the largest and most successful fisheries in the world, the U.S. has become a global model of responsible fishery management. This is a critical time and we must move forward in a thoughtful and disciplined way to ensure our Nation's fisheries are able to meet the needs of both current and future generations.

Thank you again for the opportunity to testify before you today and I'm happy to answer any questions you may have.

[The prepared statement of Dr. Crabtree follows:]

PREPARED STATEMENT OF DR. ROY E. CRABTREE, SOUTHEAST 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. My name is Roy Crabtree and I am the Southeast Regional Administrator 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 red snapper in the Gulf of Mexico and salmon in the Pacific Northwest, have been vital to the prosperity and cultural identity of coastal communities in the United States (U.S.). U.S. fisheries play an enormous role in the U.S. economy. Commercial fishing supports fishermen and fishing communities, and provides Americans with a sustainable, healthy food source. Recreational fishing is an important social activity for individuals, families and communities, and is a critical economic driver of and contributor to local and regional economies, as well as the national economy. Subsistence fishing provides an essential food source and is culturally significant for many people. Our most recent estimates for 2012 show that the amount landed and the value of commercial U.S. wildcaught fisheries remained near high levels posted in 2011 while recreational catch remained stable.¹

The Federal fishery management system is effectively rebuilding overfished fisheries. We continue to make progress towards long-term biological and economic sustainability and stability. Since its initial passage in 1976, the Magnuson-Stevens Act has charted a groundbreaking course for sustainable fisheries. When reauthorized in 2007, the Act gave the eight Regional Fishery Management Councils (Councils) and NMFS a very clear charge and some new tools to support improved science and management. Key requirements mandated the use of science-based annual catch limits and accountability measures to prevent and end overfishing, 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.

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

The U.S. now has effective tools to address marine fisheries management and, as we look to the future, we must look for opportunities to increase flexibility in our management system. While significant progress has been made since the last reauthorization, we recognize this progress has not come without a cost and that challenges remain. Fishermen, fishing communities, and the Councils have had to make difficult decisions and many areas have had to absorb the cost of conservation and investment in long-term economic and biological sustainability. In some cases, as with the Gulf of Mexico recreational red snapper fishery, such investment has produced the expected biological benefits in the form of many more and larger fish, but has not produced the expected socioeconomic benefits in the form of increased fishing opportunities. We need to address management challenges 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.

My 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 fish from a fishery that, over the long-term, will provide the greatest overall benefits to the Nation, particularly by providing seafood and recreational opportunities and affording protection to marine ecosystems.

The Councils can choose from a variety of options to manage fish stocks and meet this mandate—catch shares, area closures, gear restrictions, etc.—and 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 fishing jobs and conservation, while ensuring that overfishing is eliminated and overfished stocks are rebuilt. 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.

Central to many of the Council decisions are fishing jobs. Fishing-related jobs, both commercial and recreational, are the lifeblood of many coastal communities around our Nation. Fishermen and fishing industries rely not only on today's catch, but the predictability of future catches. Under the standards set in the Magnuson-Stevens Act, and together with the Councils, states, tribes and fishermen, we have made great strides in ending overfishing, rebuilding stocks and building a sustainable future for our fishing dependent communities. 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 last decade.

We all share the common goal of healthy fisheries that can be sustained for generations. Without clear, science-based rules, fair enforcement and a shared commitment to sustainable management, short-term pressures can easily undermine progress toward restoring the social, economic and environmental benefits of a healthy fishery. Though challenges remain in some fisheries, the benefits for the resource, the industries it supports, and the economy are beginning to be seen as fish populations grow and catch limits increase.

Progress in Implementation

Working together, NMFS, the Councils, coastal states and territories, 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, 2012, assessments demonstrated that overfishing ended for 58 percent of the 38 domestic U.S. stocks that were subject to overfishing in 2007 when the Magnuson-Stevens Act was reauthorized.² 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 33 stocks nationally since 2000.³

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 Southeast Region, NOAA, the Gulf of Mexico and South Atlantic Fishery Management Councils, the fishing industries, recreational anglers and other partners have successfully rebuilt a number of once overfished stocks, including red grouper and king mackerel in the Gulf of Mexico, black sea bass in the South Atlantic, and yellowtail snapper, which is shared by both the Gulf of Mexico and South Atlantic regions. These and other conservation gains enabled NMFS to increase catch limits for six stocks or stock complexes and eliminate or reduce two fixed seasonal closures over the last year. The additional harvest opportunities attributed to rebuilding the South Atlantic black sea bass stock alone have increased annual consumer surplus for recreational anglers, annual ex-vessel revenues for commercial fishermen and annual profits for for-hire vessels by about \$13 million, \$1 million and \$350,000, respectively.⁴ And we continue to see remarkable progress in rebuilding other stocks, including the iconic Gulf of Mexico red snapper. Both fishermen and scientists agree, and the most recent stock assessment confirms, there are more red snapper in the Gulf of Mexico today than in decades.

But meeting mandates to end overfishing, implement annual catch limits and rebuild overfished stocks can be challenging and we recognize the importance of learning from our past actions and making adjustments as needed. With that in mind, the agency has already begun the process of reviewing the National Standard 1 guidelines, which were last 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, and builds on what we and the Councils have learned in applying the latest requirements of the Act. An Advance Notice of Proposed Rulemaking was published in May 2012, which was followed by an almost 6-month public comment period where we asked the public for input on 11 topics addressed in National Standard 1. 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, or identifying issues for discussion as part of a reauthorization of the Magnuson-Stevens Act.

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, their fisheries and their ecosystems, including habitat requirements. NMFS is committed to generating the best fishery science to support the goals of the Magnuson-Stevens Act. Increasingly, we are conducting research and analyses to understand the environmental and habitat factors affecting the sustainability of fish populations. Today, we know more about our fish stocks than ever before, and it is vital that our science not regress, as this would inevitably

²See Fish Stock Sustainability Index. This report was the source for the underlying data, but the numbers presented here were compiled specifically for this hearing. Available at: <http://www.nmfs.noaa.gov/sfa/statusoffisheries/2012/fourth/Q4%202012%20FSSI%20Summary%20Changes.pdf>

³See Fish Stock Sustainability Index. Available at: http://www.nmfs.noaa.gov/sfa/statusoffisheries/2012/fourth/MapRebuiltStocksCY_Q4_2012.pdf

⁴Regulatory Amendment 19 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region. Available at: http://sero.nmfs.noaa.gov/sustainable_fisheries/satl/sg/2013/reg_am19/documents/pdfs/sa_reg_am19_appen.pdf

lead to increased uncertainty and 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 SouthEast Data, Assessment, and Review (SEDAR) is a cooperative process initiated in 2002 to improve the quality and reliability of Southeast Region stock assessments, and to increase stakeholder participation in the process. SEDAR is managed by the Caribbean, Gulf of Mexico, and South Atlantic Fishery Management Councils in coordination with NMFS and the Atlantic and Gulf States Marine Fisheries Commissions. SEDAR emphasizes stakeholder participation in assessment development, transparency in the assessment process, and a rigorous and independent scientific review of completed stock assessments.

The Magnuson-Stevens Act required improvements to recreational fisheries data collected by NMFS for use in management decisions. In October 2007, NMFS established the Marine Recreational Information Program, a new program to improve recreational fishery data collection efforts, consistent with the Magnuson-Stevens Act requirement and the 2006 recommendations of the National Research Council. The Marine Recreational Information Program is a national system of coordinated regional data collection programs designed to address specific needs for improved recreational fishing information. One major component of the Marine Recreational Information Program is the development of a national registry of anglers that, in the Southeast Region, relies on data from state-issued fishing licenses. Also required by the Magnuson-Stevens Act, that 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 on all coasts in 2015.

The Marine Recreational Information Program is also developing and implementing numerous other survey improvements to address the National Research Council's recommendations, including improved estimation methodologies, improved shoreside survey design, and improvements in for-hire fishery data collections. We are now integrating the more accurate and precise catch estimates produced by the survey into stock assessments and management decision making for fish stocks in the Southeast Region with recreational catches. Also, we are working with the states to address unique or specialized needs like those of pulse fisheries such as Gulf of Mexico red snapper, which may open and close before data are available to monitor or evaluate catches. The Marine Recreational Information Program is not currently designed to support real-time monitoring or management of recreational fisheries, as it delivers data in two-month increments and does not cover all areas of the country, including the U.S. Virgin Islands in the Southeast Region. In addition, we are implementing electronic reporting requirements for Gulf of Mexico and South Atlantic headboat vessels and are considering extending those requirements to charter vessels to help to get recreational data into scientists' and managers' hands more quickly.

Adequate observer coverage also is critical for improving data collection related to bycatch. National standard 9 requires fishery management plans to take into account fishery impacts on bycatch, particularly for protected species. NMFS continues to work with the Councils and through take reduction teams established under the Marine Mammal Protection Act to identify measures to minimize bycatch and other impacts on sea turtles, corals, dolphins and other protected species in Gulf of Mexico, South Atlantic and U.S. Caribbean waters.

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. Both in the U.S. 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 three LAPPs in the Southeast Region, including a South Atlantic commercial wreckfish individual transferable quota program implemented in 1992, a Gulf of Mexico commercial red snapper individual fishing quota program implemented in 2007 and a Gulf of Mexico commercial grouper and tilefish individual fishing quota program implemented in 2010. While the grouper and tilefish program is too young to fully evaluate, recent reviews of the wreckfish and red snapper programs demonstrate they are working as intended. The wreckfish program eliminated excess fleet capacity and the race to catch fish and reduced gear and fishing area conflicts. The red snapper program is better aligning the capacity of the fleet

with the commercial catch limit, mitigating short fishing seasons, improving safety at sea and increasing the profitability of the fishery. Individual fishing quota participants are targeting red snapper year round, compared to an average of 121 day seasons prior to implementation of the LAPP. And the average ex-vessel price of red snapper in 2012 was 27 percent greater than the average inflation adjusted ex-vessel price in 2007. 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.

Looking to the Future

Remaining Challenges

Even with these successes, we know that challenges remain. The Southeast Region has made remarkable progress ending overfishing and rebuilding overfished stocks to benefit both commercial and recreational user groups with fundamentally different goals and objectives. This is perhaps most evident in the Gulf of Mexico red snapper fishery. Rebuilding measures put in place in 2007 are working. That stock is rapidly recovering and now supports the largest combined commercial and recreational catch quota ever specified for this stock. Commercial individual fishing quota program participants directly benefit from stock recovery by receiving additional pounds of quota that can be fished more efficiently as catch rates and fish size increase over time. But recreational fishermen who simply desire the opportunity to fish are seeing that opportunity progressively restricted as the stock recovers because they are able to reach their quota in fewer and fewer days. Also, inequities created by state jurisdictional and regulatory inconsistencies have affected the distribution of recreational fishing opportunities and rebuilding benefits, deeply polarizing the Gulf Council on critical decisions needed to effectively address long-standing issues. A lasting red snapper management strategy will require broad agreement, equitable application and management support at both state and Federal levels.

Currently, all Gulf Coast states have expressed support for moving to a regional red snapper management strategy which could provide greater flexibility in tailoring the recreational fishing season, bag limit and minimum size limit to meet constituent needs. The Gulf Council is working toward implementing such a regime in the recreational fishery for the 2015 fishing year. NMFS fully supports this and any other management option that has broad stakeholder support and provides the fishery greater stability, while meeting conservation objectives. The Council also is considering reallocating red snapper catches between the commercial and recreational sectors, and exploring other innovative approaches, such as authorizing recreational participation in the commercial individual fishing quota program through inter-sector trading, and separate management of the for-hire and private sectors, commonly known as sector separation. But the potential benefits of all these approaches are limited by several outdated and unique statutory requirements specific to Gulf of Mexico red snapper. For example, section 407(c) of the Magnuson-Stevens Act provides specific criteria for identifying participants in, and weighing votes cast, in referenda conducted in the fishery based on participation in the fishery between 1993 and 1996, restricting our ability to conduct fair and meaningful referenda on current management proposals. And section 407(d) of the statute requires the Gulf Council and NMFS to establish a separate catch limit for the recreational fishery to apply to both for-hire and private participants, and to close that fishery inseason when we determine the catch limit has been reached.

Many fish stocks in the Southeast Region are managed together with other stocks in mixed stock complexes. The requirement to end overfishing of all stocks in mixed-stock fisheries has protected less productive species but could reduce the yield of healthy stocks in the same complex. Also, a number of fisheries in the Southeast Region are extremely data limited, making it challenging to manage and monitor annual catch limits in the way Congress envisioned when they last reauthorized the Magnuson-Stevens Act in 2007. In the U.S. Caribbean, data are too limited to produce meaningful stock assessments. Looking ahead, we must continue to improve the quality and quantity of scientific data, continue progress made on addressing overfishing and rebuilding stocks, continue to explore new and innovative management tools, and better address the difficult transitions that can come with management changes leading to more biologically and economically sustainable fishery resources.

Improvements to our stock assessments and monitoring efforts will lead to more effective annual catch limits and accountability measures. Ensuring solid, science-based determinations of stock status and responsive management will also require better linkages to ever-shifting biological, socio-economic and ecosystem conditions.

U.S. fisheries are extraordinarily diverse in value, participation and science needs. The Magnuson-Stevens Act provides flexibility in adapting management plans to the life history differences among species and nuances of particular fisheries, as well as to the unique regional and operational differences among fisheries and in the fishing communities that they support.

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

It is also increasingly important that we better understand ecosystem and habitat factors, such as the effects of climate change, hurricanes, large-scale flooding and drought events, and oil spills in the Gulf of Mexico, and incorporate them into our stock assessments and management decisions, because resilient ecosystems and habitat form the foundation for robust fisheries and fishing jobs. The Gulf of Mexico has experienced an unprecedented number of natural and man-made disasters over the last decade, all of which have impacted commercially and recreationally important species and their habitats. Most recently, U.S. Secretary of Commerce Penny Pritzker declared a commercial fishery failure for the oyster fishery along the west coast of Florida, which was impacted by excessive drought conditions in Apalachicola Bay and elsewhere in the Florida panhandle during the 2012–2013 winter fishing season. Similarly, it is important that we meet our responsibilities under the Magnuson-Stevens 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. As we end overfishing and rebuild stocks, the strategic alignment of habitat and protected species conservation efforts with rebuilding and managing fish stocks will be a key component of NOAA's success.

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.

It is critical that we maintain progress towards 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. A primary goal in the Southeast Region is to bring more stability to recreational fisheries and ensure the fishery management response to recreational catch trends is appropriate. Also, we want to ensure that fishermen are motivated to provide timely, accurate catch data.

The Next Reauthorization of the Magnuson-Stevens Act

With some of the largest and most successful fisheries in the world, the U.S. 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. marine fisheries and their management. The conference was developed around three themes: (1) improving fishery management essentials; (2) advancing ecosystem-based decision making; (3) and providing for fishing community sustainability.

We were excited to see a wide range of stakeholders represent many points of view, from commercial and recreational fishing, to the conservation and science and management 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 U.S. has made great progress in ending overfishing in federally-managed fisheries, rebuilding overfished stocks, and ensuring conservation and sustainable use of our marine fisheries. Fisheries harvested in the U.S. are scientifically monitored, regionally managed, and enforced under 10 national standards. But, we did not get here overnight. Our Nation's journey toward sustainable fisheries has evolved over the course of 35 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, and ones 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 among NOAA, the states, the Councils and the 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.

It is important to take time and reflect on where we have been to understand where we are. 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 and the fishermen, and the ecosystems and communities. We look forward to these discussions.

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

Senator BEGICH. Thank you very much for your testimony.

Next we have Douglass Boyd, Chairman, Gulf of Mexico Fisheries Management Council. Mr. Boyd, I have to step out for about a minute here, so I apologize. But please go ahead and start your testimony.

STATEMENT OF DOUGLASS BOYD, CHAIRMAN, GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

Mr. BOYD. Thank you, Mr. Chairman. Senator Begich, Ranking Member Senator Rubio, and Subcommittee members: Thank you for this opportunity to share with you the perspectives of the Gulf of Mexico Fishery Management Council relevant to the reauthorization of the Magnuson-Stevens Act. My name is Douglass Boyd and I'm the current Chairman of the Gulf of Mexico Fishery Management Council and I'm in my fourth year as a member.

The Gulf Council currently has six fishery management plans that actively manage 40 finfish and shellfish species, plus numerous species of corals. Four of our fishery management plans are multi-species, including reef fish, coastal migratory pelagics, corals, and shrimp. The single-species fishery management plans include spiny lobster and red drum. Nineteen of our managed 40 species have been evaluated by formal stock assessments.

The Gulf Council is dedicated to managing fish as a primary goal, but must balance competing science, social, and economic objectives, as stated in the ten national standards. The council strives to manage our fisheries for the greatest overall benefit to the Nation in a fair and equitable manner while addressing the best avail-

able science, socioeconomic communities, economic efficiency, and our changing environmental conditions.

The Gulf Council feels that, while the Act is sound in basis, improvement could be considered during reauthorization in areas of administration, science, and management application. Specifically, an ongoing challenge in rebuilding timeframes for the Gulf Council is a lack of flexibility. The rebuilding of a particular stock as quickly as practical is desirable. However, the current mandated rebuilding times are inflexible and at times contradictory. Rebuilding times should have the flexibility to be tailored to the biological and socioeconomic characteristics of each stock. Statutory refinement in this reauthorization could provide greater flexibility regarding rebuilding plans by requiring overfished stocks to be rebuilt to MSY, or optimum yield, as quickly as possible and in a manner that protects an overfished stock from further decline.

One of the more complex issues facing the Gulf Council is the management of our mixed use fisheries and balancing competing interests between commercial and recreational sectors. We encourage the Committee to consider new approaches to managing recreational fisheries, as they considered in the last reauthorization innovative ways to manage commercial fisheries. Consideration could be given to successful management techniques employed in State management of recreational fisheries.

Science is the foundation for fisheries management. The demand for science in stock assessments from the three Southeast regional councils is greater than our science centers' capacity, production capacity. The loss of experienced personnel and the training time for stock analysts, along with reduced funding, has resulted in a competitive process for science center resources. Continued and additional financial investment in stock assessment capability is of the greatest importance in this reauthorization process.

Cooperative research programs provide a means to improve the accuracy of stock assessments and engage stakeholders in the research process. Many of these important programs face inadequate or uncertain funding from year to year. Reauthorization should include provisions for funding cooperative research programs.

Councils depend on effective monitoring and reporting systems to help inform and corroborate catch and bycatch estimates and dictate potential problems as early as possible. An amendment to the Act should contain specific provisions securing long-term funding for monitoring and reporting systems.

Section 407 of the Magnuson-Stevens Act pertains to the management of Gulf red snapper. This section needs updating and revision. Specifically, the referendum requirements for individual fishing quota programs are inconsistent for referenda across the various regional councils and IFQ programs implemented in the Gulf region.

Specific portions of the section are outdated. Reauthorization should revisit Section 303(a)(6)(D) and Section 407. As currently used in the Magnuson-Stevens Act, the terms of "overfishing" and "overfished" are sometimes treated the same and used interchangeably, leading to confusion of intent. In reauthorization Congress could provide clear definitions as to separate criteria for excessive fishing rates and poor stock health respectively.

Mr. Chairman, thank you for the opportunity of speaking with you today. I'd be happy to answer any questions.
[The prepared statement of Mr. Boyd follows:]

PREPARED STATEMENT OF DOUGLASS BOYD, CHAIRMAN, GULF OF MEXICO FISHERY
MANAGEMENT COUNCIL

Introduction

Chairman Senator Mark Begich, Ranking Member Marco Rubio and Subcommittee members, thank you for this opportunity to share with you the experiences and perspectives of the Gulf of Mexico Fishery Management Council (Gulf Council) relevant to the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (Magnuson-Stevens Act).

My name is Douglass Boyd and I am the Chair of the Gulf of Mexico Fishery Management Council and currently in my fourth year as a member.

The Gulf Council has six fishery management plans that actively manage 40 finfish and shellfish species plus numerous species of corals. Nineteen or roughly half of our managed species have been evaluated by formal stock assessments.

The Magnuson-Stevens Act established a framework for sustainable fishery management which has contributed to the rebuilding of many depleted U.S. fisheries and serves as an example of proactive management for the world. As we prepare for the reauthorization of the Magnuson-Stevens Act, I think it is important to ensure that its requirements will position the regional fishery management councils to manage fisheries for the greatest overall benefit of the nation, across the full spectrum of stock assessment characteristics, stock conditions, and dynamic environmental conditions.

The Magnuson-Stevens Act delegates a portion of decision-making authority to the individuals on Councils who are most familiar with each region's fisheries. As such, this allows management plans to be tailored to the specific characteristics of each fishery. During this past year in discussions about reauthorization of the Magnuson-Stevens Act, it has become apparent that the Councils need more flexibility to make the decisions that are best for each species and respective fisheries.

My testimony today will outline the progress we have made in the Gulf of Mexico since 2006 and will identify several critical challenges and opportunities. During this reauthorization to the Magnuson-Stevens Act, the Gulf Council believes there are opportunities to make small, targeted changes that can provide major long-term improvements in our ability to manage adaptively without jeopardizing the sustainability of our fisheries.

Relative to overfishing status, in 2006 we had five Gulf of Mexico federally managed species that were undergoing overfishing; however, today we have no species classified as undergoing overfishing. We are proud of this achievement and partly credit the 2006 reauthorization.

Relative to overfished status, in 2006 we had red snapper and greater amberjack were our only overfished species. Today we have four species considered to be overfished. Of the two new overfished species one is the result of changing environmental conditions and the other due to unique life history characteristics making it more susceptible to becoming overfished.

The 2006 reauthorization, combined with several natural and man-made events, have altered management in ways that could not have been foreseen. The hurricane seasons of 2004 and 2005 were among the most active and destructive in Gulf of Mexico history, causing widespread damage to fishing communities and vessels around the coast. In 2010 the Deepwater Horizon oil spill resulted in a closure to fishing of approximately a third of the Gulf of Mexico for most of the summer. Even in areas not directly impacted by the closure, fishing activity suffered as tourists avoided the Gulf of Mexico and greatly reduced consumption of safe and previously valued finfish and shellfish. While stocks managed by the Gulf Council appear to have escaped immediate damage, the long-term effects on fish and habitat remain to be determined.

The 2006 reauthorization introduced several changes to the Magnuson-Stevens Act. From a management perspective, the most significant changes were:

- The requirement that rebuilding plans end overfishing immediately.
- The requirement that all managed stocks have annual catch limits.
- The addition of a limited access privilege program referendum process for stocks other than red snapper.

Prior to 2006, the Magnuson-Stevens Act required that rebuilding plans end overfishing but did not require that they do so immediately. Whereas previously we could implement a gradual reduction in fishing mortality to balance conservation with socio-economic needs, currently we are forced to end overfishing immediately with no leeway to take into account short-term socio-economic impacts.

Rebuilding Timeframes

Challenges

One of the ongoing challenges of the rebuilding timeframes for the Gulf Council is lack of flexibility. The Gulf Council understands that a healthy stock provides higher catch levels than one that is overfished and thus provides greater long-term socio-economic benefits. Therefore, rebuilding a stock as quickly as practicable is desirable. However, the current Congressional mandated rebuilding timelines are inflexible and, at times, contradictory. For example, a stock that takes less than 10 years to rebuild in the absence of fishing mortality requires more restrictive management than a stock that is more severely overfished and takes more than 10 years to rebuild.

Tools, Resources, and Statutory Refinement Needs

One suggestion for statutory refinements to the Magnuson-Stevens Act would be to have greater flexibility for the Councils regarding rebuilding plans. Rather than a fixed 10-year maximum rebuilding period, rebuilding times should have the flexibility to be tailored to the biological and socio-economic characteristics of each stock.

By allowing the Councils greater flexibility, we would be afforded the opportunity to design rebuilding plans and respond to ending overfishing that would be more appropriate for the life history of a particular stock. Greater flexibility would also allow a council to reduce severe short-term social and economic impacts without jeopardizing the ability of a stock to rebuild to maximum sustainable yield (MSY). Congress can still provide appropriate guidance by requiring overfished stocks to be rebuilt to MSY or optimum yield (OY) *as quickly as practicable, and in a manner that protects an overfished stock from further decline.*

Establishing Annual Catch Limits

Challenges

Annual catch limits (ACLs) and accountability measures (AMs) have the potential to be powerfully effective management tools, but their utility depends on the quality of the data used to assess stock size and to set appropriate catch limits. The new system of ACLs and AMs has worked well in fisheries that have moderate to high levels of data and stock assessments upon which to establish an appropriate ACL, but establishment of ACLs for data-poor fisheries and mixed stock fisheries has been challenging. These fisheries often lack the life history information (*e.g.*, age and growth, size at reproductive maturity, and reproductive potential) and, in some cases adequate catch and effort data that are needed to scientifically estimate ACLs or to manage them effectively with AMs. This lack of basic fishery data precludes or complicates the application of any scientific method for establishing ACLs for data poor stocks. Conversely, stocks that have been well studied with enough information to complete a stock assessment have the scientific basis for establishing appropriate ACLs.

The biggest ACL-related challenges encountered by the Gulf Council is establishing ACLs for its reef fish species that constitute incidental catches within the grouper and snapper targeted fisheries. For multi-species targeted fisheries, the mandate to establish ACLs for incidental species can lead to closures that cause unnecessary economic losses relative to the harvest of the targeted species and with minimal biological gain for either the targeted or incidental species. In other instances, it may be very important to control incidental fishing mortality on a stock in a mixed fishery. The councils should have the ability to determine the appropriate measure to use depending on the particular characteristics of a fishery in order to achieve their management objectives. Undesirable closures of target fisheries due to ACLs established for incidental species usually result in unnecessary economic losses relative to the harvest of the targeted species and minimal biological benefits.

Tools, Resources, and Statutory Refinement Needs

The 2006 reauthorization required ACLs and AMs for all managed stocks. The implementation of recreational AMs, including paybacks for overages, has been difficult in some instances. The Councils need flexibility to determine which fishery and in which circumstances an ACL is most appropriate. Many fisheries are appropriately managed with ACLs but there are instances when ACLs are not the opti-

mal management strategy and there are no clear benefits achieved by establishing them.

A first step in this direction would be for Congress to maintain the overall language for ACLs but to give the Councils the flexibility to apply ACLs, *where practicable*. We need the flexibility to decide when an ACL for a data poor or mixed species stock may not be appropriate based on current management and monitoring programs. The Councils need additional flexibility to more effectively manage small scale, incidental, or data-poor fisheries that may be managed more effectively using management tools other than ACLs and AMs. Another area of flexibility Congress could provide would be to give the Councils discretion to make Scientific and Statistical Committee catch advice on data-poor stocks advisory rather than binding, if certain conditions are met.

Preventing and Ending Overfishing Immediately

Challenges

In the Gulf of Mexico the greatest economic hardship has resulted from the requirement to end overfishing immediately. The requirement of the Magnuson-Stevens Act to end overfishing immediately can have destabilizing effects on some fisheries. The red snapper and gag grouper fisheries have been dramatically impacted by this requirement. Specific flexibility to eliminate overfishing under certain circumstances over a multi-year period would allow the Councils to substantially mitigate short-term social and economic dislocation in our managed fisheries. The Gulf Council has a good track record for reducing overfishing. Even prior to the 2006 reauthorization, we rebuilt the king mackerel and Spanish mackerel fisheries in the Gulf of Mexico within a generation time and still allowed a viable fishery to operate.

There also may be some cases where a stock is overfished that some transient overfishing could be tolerated during stock rebuilding without jeopardizing the stock's ability to recover or to produce MSY or OY on a continuing basis. The fishing public can understand the need to fish at or below a rate that allows a population to replace itself. However, problems occur when their fisheries are forced to endure the very low exploitation rates that are often necessary to achieve MSY on a long-lived, slow growing stock. The ability to end overfishing over a period of time provides the flexibility to implement a rebuilding plan in balance with potential negative economic impacts.

Tools, Resources, and Statutory Refinement Needs

Overfishing should be managed as a transient condition (*i.e.*, a rate) that can occur on both overfished stocks and stocks that are not overfished. Temporary or short-term overfishing on a non-overfished stock, which can often be corrected in a relatively short period of time, does not jeopardize the long-term ability of a stock to achieve MSY or OY on a continuing basis. By comparison, an overfished stock is the result of years of overfishing or environmental changes that can typically only be corrected over a longer time period. The current requirement to end overfishing immediately, regardless of whether the fishery is actually overfished, has likely caused undue and severe economic impacts in U.S. fisheries. Obviously, if overfishing is allowed to continue over a long enough time it will result in an overfished stock, but overfishing, *per se*, is not as serious of a management problem as is an overfished stock because overfishing over a short period of time does not jeopardize the long-term ability of a stock to achieve MSY or OY on a continuing basis. *Providing for a multi-year reduction in fishing rates to eliminate transient overfishing conditions, particularly in cases where the stock is healthy, would enhance regulatory stability.*

Additional Tools, Resources, and Statutory Refinement Needs

Definitions of Overfishing and Overfished

An additional suggestion for reauthorization is for Congress to provide clear definitions of "overfishing" and "overfished" as separate criteria for excessive fishing rate and poor stock health, respectively. As currently used in the Magnuson-Stevens Act, the two criteria are treated the same and used interchangeably, sometimes leading to confusion as to intent. Overfishing is a transient condition (*i.e.*, a rate) that can occur on both a healthy and an overfished stock and that can be corrected in a relatively short period of time. However, an overfished stock is the result of years of overfishing or environmental changes that typically can only be corrected gradually over a longer time period.

Section 407 Red Snapper Mandates

Those parts of Section 407 of the Magnuson-Stevens Act that pertain to Gulf of Mexico red snapper management need revision to improve the management of red

snapper in the Gulf of Mexico. Specifically, Sections 407(b) and (c) should be removed because a red snapper limited access privilege program has since been implemented in the Gulf of Mexico. Referendum requirements in Section 407(c) should be eliminated since Section 303A(c)(6)(D) now provides sufficient guidance regarding referendum requirements for modifying existing programs. Referendum requirements for limited access privilege programs, in general, are inconsistent across the regional Councils and should be revisited during this reauthorization.

Also, Section 407(d) should be eliminated to afford more flexibility in managing recreational red snapper quotas to allow for more appropriate AMs rather than in-season closures. As written, 407(d) prohibits the retention of red snapper by all components of the recreational sector once the recreational quota is determined to have been met, including charter fishing. An example of how this mandate complicates creative management solutions is seen in the recently approved pilot study for a cooperative of headboat operators that will test the efficacy of a for-hire headboat tradable quota system over the next two years. However, due to 407(d), study participants must forfeit any remaining quota assigned under the program for a given year, should the total recreational quota be determined to have been harvested prior to the end of the year.

Fishery Data and Funding

Science is the foundation for fishery management. The ACL requirements have increased the demand for assessment products from the regional science centers. The effectiveness of the regional Councils is integrally linked with the availability of quality fishery data at adequate frequencies. In particular, additional scientific resources are needed to bring data-poor stocks up to an adequate assessment level.

The demand for science and stock assessments from the three Southeast Region Councils is greater than our science center's production capacity. A loss of experienced personnel and the training time for stock analysts along with reduced funding has resulted in a competitive process for science center resources. Continued and additional financial investment in stock assessment capacity is of the greatest importance in this reauthorization process.

Cooperative research programs provide a means to improve the accuracy of stock assessments while engaging stakeholders in the research process. Despite the importance of these programs, many of them face inadequate or uncertain funding from year to year. The reauthorization should include provisions for funding of cooperative research programs around the country.

The Councils depend on having effective monitoring and reporting systems in place to help inform catch and bycatch estimates and to detect potential problems in a fishery as early as possible. Not only do these programs require adequate funding to operate, but they require consistent funding from one year to the next. Given the critical nature of these programs, an amendment to the Magnuson-Stevens Act should include specific provisions securing long-term funding for necessary monitoring and reporting programs.

Congress should avoid adding any new unfunded mandates and should ensure that appropriate funds are available for the Councils to meet the existing requirements of the Magnuson-Stevens Act. Continued investment in stock assessment capacity is of paramount concern in this reauthorization process.

Senator BEGICH. Thank you very much. I apologize, I had to step out for a call there.

Next on the list is Ben Hartig, Chairman of the South Atlantic Fisheries Management Council. Thank you very much again for being here.

STATEMENT OF BEN C. HARTIG, CHAIRMAN, SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

Mr. HARTIG. Chairman Begich, members of the Committee: Thank you for the opportunity to—

Senator BEGICH. Is your mike on?

Mr. HARTIG. Chairman Begich, members of the Subcommittee: Thank you for the opportunity to appear before you today to discuss the South Atlantic perspective regarding the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act. My name is Ben Hartig. I'm a commercial representative from

the State of Florida and current Chairman of the South Atlantic Council. I'm also a full-time commercial fisherman, fishing off the Southeast coast of Florida for over 36 years. We have addressed the questions posed and have provided the information Chairman Rockefeller requested in our written testimony.

It is important to realize that not all of the successes in the South Atlantic in ending overfishing and rebuilding stocks should be attributed to the 2006 reauthorization. Some of our successful rebuilding efforts that are paying dividends today were implemented prior to the reauthorization's legal mandates. However, there is no question that the current reauthorization is working for the fish. Overfishing has ceased for most of our assessed species, stocks are ahead or meeting the rebuilding time frames in most cases, and fishermen are seeing population increases in size and abundance for some species that have not been observed in a decade or more.

We are recommending five areas be addressed in the current reauthorization: flexibility in ending overfishing, flexibility in rebuilding overfished stocks, defining "overfishing" on the basis of the recruitment overfishing level and not MSY, harvest moratoriums, specifying maximum sustainable yield for stock complexes.

We've established that the 2006 reauthorization is working for the fish, but what about the fishermen? Consideration of the human element of fisheries management has all but disappeared since the 2006 reauthorization and must be reintroduced back into the management process. Some balance needs to be restored between the needs of the fish and the needs of the fishermen.

In the South Atlantic, the requirement to end overfishing immediately is the significant problem. The Act should be amended to allow the council latitude to phase in the reductions to end overfishing over a longer timeframe and to recognize that overfishing has multiple biological definitions.

We have actually used the approach of phasing in reductions necessary to end overfishing over a three-year period for two of our important species, Black sea bass and snowy grouper. Both species were assessed this year. Black sea bass was completely rebuilt within its rebuilding schedule and the ABC was double. For snowy grouper overfishing is no longer occurring and, while still overfished, it is 10 years ahead in its rebuilding schedule. Phasing in of catch restrictions allowed fishermen time to adjust their business plans to catch reductions, reducing the social and economic impacts that occur with the current requirements of ending overfishing immediately. The South Atlantic Council believes that this is strong evidence to support the consideration of longer timeframes to end overfishing.

There must be more flexibility in rebuilding overfished stocks by eliminating the arbitrary 10-year requirement and using the current biologically based rebuilding period alternative of fishing mortality, F equals zero plus one generation time. Using MSY as a basis for establishing harvest limits is problematic. Estimating MSY and the exploitation rate that provides it is difficult. The true danger to a fish stock comes when exploitation exceeds the recruitment overfishing level.

Our solution would be to amend the Act to set maximum fishing mortality threshold at the recruitment overfishing level. This would allow managers to balance foregone yield against social, economic, and ecosystem concerns when establishing exploitation targets and preventing overfishing.

Moratoriums that result from ending overfishing immediately should be avoided at all costs. They should not be implemented where stocks have demonstrated improvement with past management controls. Both king and Spanish mackerel were severely overfished in the past. Both stocks were rebuilt within one generation without having to close the fisheries and have been sustainably managed for almost 20 years.

Mixed species fisheries cannot be adequately managed by simplistic application of single-stock principles such as MSY. Stocks in a complex will vary in abundance over time. It is impossible for all to be at high abundances at the same time.

Annual catch limits should not be required for unassessed stocks due to the fact that historical landings are uninformative for estimating stock abundance. Basing ACL's for unassessed stocks on the quantitative portion of historical landings under the guise of the precautionary principle results in ACL's with little scientific basis.

The South Atlantic Council has faced significant challenges implementing the statutory mandates resulting from the 2006 reauthorization, particularly in ending overfishing immediately. We have implemented substantial reductions in ACL's for some species and essentially closed one of the most important fisheries, red snapper, based on ending overfishing. This has come at a high cost to recreational and commercial fishermen and the business-related infrastructure they support.

Based on management successes in the past, council believes that there is ample evidence to support extending the time-frame to end overfishing without impacting rebuilding schedules. We respectfully ask that you give due consideration to our recommendations so all fishermen in the South Atlantic will benefit from your decisions.

Thank you for allowing me to appear before you today on behalf of the Council.

[The prepared statement of Mr. Hartig follows:]

PREPARED STATEMENT OF BEN C. HARTIG, CHAIRMAN, SOUTH ATLANTIC FISHERY
MANAGEMENT COUNCIL

Chairman Begich, members of the Subcommittee, thank you for the opportunity to appear before you today to discuss the South Atlantic perspective regarding the Reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (MSA or Act). My name is Ben Hartig; I am the commercial representative from the State of Florida and current Chairman of the South Atlantic Council. I am also a full time commercial fisherman, fishing off the Southeast coast of Florida for over 36 years. We have addressed the questions posed and have provided the information Chairman Rockefeller requested in our written testimony.

I would like to take this opportunity to thank both the House and Senate for dedicating time and resources for the exhaustive review regarding the successes and challenges of the 2006 MSA Reauthorization. I felt strongly enough about the severe economic consequences experienced by both recreational and commercial fishermen in the South Atlantic that I attended both of the fishermen's rallies that occurred several years ago. My hope was that a fair hearing of the problems experienced by fishermen due to the 2006 Reauthorization would be held. While the timeliness can

be questioned, the number of hearings, the caliber and diversity of the witnesses and the commissioning of the National Research Council (NRC) study has exceeded my expectations.

It is important to realize that not all of the successes in the South Atlantic in ending overfishing and rebuilding stocks should be attributed to the 2006 Reauthorization; some of our successful rebuilding efforts that are paying dividends today were implemented prior to the reauthorization's legal mandates (*e.g.*, black sea bass, king mackerel, Spanish mackerel). However, there is no question that the current Reauthorization is working for the fish. Overfishing has ceased for most of our assessed species; stocks are ahead of or meeting their rebuilding timeframes in most cases and fishermen are seeing population increases in size and abundance for some species that have not been observed in a decade or more. Red snapper is a prime example yet the fishery is still essentially closed. We were only able to allow two 3-day seasons last year and 1 3-day season this year for the recreational sector while the commercial fishery was limited to 50 and 75 pound bycatch trip limits with low commercial Annual Catch Levels (ACLs), that closed harvest when the allocation was met. Even though the seasons were short, a significant portion of the landings of both recreational and commercial fisheries was sampled by an unprecedented state, Federal and public cooperative effort. Those efforts are vitally important for the next stock assessment.

The South Atlantic Council has identified five areas we propose be addressed in the current reauthorization:

- (1) Flexibility in ending Overfishing.
- (2) Flexibility in Rebuilding Overfished Stocks.
- (3) Define Overfishing on the Basis of the Recruitment Overfishing Level and not MSY.
- (4) Restrictions on Applying Harvest Moratoriums.
- (5) Maximum Sustainable Yield (MSY) Specification for Stock Complexes.

We've established that the 2006 Reauthorization is working for the fish, but what about the fishermen? Consideration of the "human element" of fisheries management has all but disappeared since the 2006 Reauthorization and must be reintroduced back into the management process. One example is that National Standard 1 (NS 1) trumps National Standard 8 (NS 8), and social and economic considerations are no longer allowed in the context on ending overfishing and rebuilding timelines. Qualitative changes in stock abundance are no longer relevant, anecdotal observations from fishermen no longer considered and the Council has been completely removed from the Allowable Biological Catch (ABC) selection process once the ABC control rule is established. *{NS 1: Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry. NS 8: Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities}.*

Some balance needs to be restored between the needs of the fish and the needs of the fishermen. In the South Atlantic, it is not the rebuilding timelines that are causing the problems but the requirement to end overfishing immediately and the Fmsy basis of the overfishing definition. The Act should be amended to allow the Council latitude to phase in the reductions to end overfishing over a longer timeframe and to recognize that overfishing has multiple biological definitions. Our South Carolina State Representative, Mel Bell offered a great medical analogy that speaks to this issue: "The current system is designed in such a way that if we were talking about a prescribed treatment for a patient diagnosed with a serious disease the focus now seems to be on the timing of recovery regardless of any serious side effects of the treatment. If the patient can be placed on a demonstrable road to recovery in such a way that minimizes or balances potential dangerous side effects, costs and risks, that would make more sense. It's a matter of balancing the need for specific timing in the declaration of recovery/cure and the possibility of some very serious complications from the chosen prescribed treatment and recovery rate. The mandate should be to get on and stay on the road to recovery rather than to insist that it must be completed in "X" years for every fishery in need".

The South Atlantic Council has actually used the approach of phasing in reductions necessary to end overfishing over a three year period for two of our important species black sea bass and snowy grouper. Both species were assessed this year. Black sea bass is completely rebuilt within the rebuilding schedule and the ABC

was doubled; for snowy grouper overfishing is no longer occurring and while still overfished, it is 10 years ahead of its rebuilding schedule. The phasing in of catch restrictions allowed fishermen time to adjust their business plans to the catch reductions reducing the social and economic impacts that occur with the current situation of ending overfishing immediately. The South Atlantic Council believes that this is strong evidence to support the consideration of longer timeframes to end overfishing. It is important to note that the phase-in periods used in these examples included significant reductions in harvest and fishing mortality; the delay was simply in achieving a mortality rate below the F_{msy} level, the overfishing definition prescribed by the MSA. On the basis of other important biological measures, such as recruitment overfishing and measures of spawning potential, there was considerably less delay in ending overfishing.

That raises the question of just what is meant by overfishing. In reality there are various definitions of overfishing. For example, recruitment and growth overfishing are basic measures that can be readily estimated for most stocks. Of these, recruitment overfishing is the most damaging to sustainability, as exceeding this level jeopardizes the ability of a stock to replace itself. At the other extreme is growth overfishing, where there is no risk to sustainability but a loss of potential harvest to the users. Maximum Sustainable Yield combines concepts of both the basics of recruitment and growth overfishing, and usually lies somewhere between these extremes. Unfortunately, Maximum Sustainable Yield is very difficult to estimate for fish populations. Another issue with MSY lies in the way constituents typically perceive overfishing. Non-scientists tend to recognize overfishing in the recruitment sense, since when they encounter fewer fish they recognize a problem in the population. They will often support some level of regulation to reverse such situations, but have difficulty understanding the need for the more severe regulations necessary to end MSY-based overfishing.

Overfishing based on MSY standards has been and continues to be a problem in the South Atlantic for a number of reasons. Early assessments for snapper/grouper species were much simpler and less scientifically rigorous than statistical catch at age models currently used. As a result, they could not provide estimates of MSY so alternatives were chosen for evaluating overfishing. These alternatives were typically based on preventing recruitment overfishing to ensure sustainability. The new generation of stock assessment scientists or “mathemagicians”, which I do not use as a disparaging term but a compliment, are able to do so much more with so little data. This has resulted in estimates of MSY for more stocks, but in many cases these MSY levels allow much less fishing pressure than the earlier measures. In addition, while we have received results from stock assessments including analysis with less than optimal data, there are costs associated with those results in the form of “data uncertainty”. This has to be quantified in the assessment and the impacts come in the form of lower catch estimates and it is the fishermen that pay a high price for not having adequate data. Virtually every first-time assessment done by these new analysts for species in the snapper/grouper complex indicates overfishing is occurring or approaching overfishing, or the stock is overfished or both stock conditions exist.

An example of a recent first time assessment is blueline tilefish. The results from that assessment indicate that overfishing is occurring and the stock is precariously close to becoming overfished. To end overfishing immediately the Council needs to reduce landings by 68 percent based on the current Act. That’s a tough pill for our recreational and commercial fishermen to swallow. The social and economic impacts could be substantially reduced by allowing overfishing reductions to be phased in over a longer time period. The Council is planning on using emergency action to implement the necessary reductions at the December meeting.

Another problem the Council faced in the past was setting quotas in declining fisheries. The Council would set an ABC from a simplistic assessment expecting the stock to rebuild. By the time the stock was assessed again the landings continued to decline and a new lower quota was implemented. Chasing declining fisheries was a problem until the new generation of stock assessment scientists arrived with the implementation of the Southeast Data and Assessment Review in 2002. This is a stock assessment process developed to improve the quality and reliability of stock assessments in the Southeast. The Council has been diligent in implementing scientific stock assessment recommendations over the years and in the case of greater amberjack enacted more restrictive regulations than the assessment indicated were needed based on fishermen’s perspectives of stock condition. The regulations worked and by the time the greater amberjack stock was assessed for the first time by the new generation of stock assessment scientists the fishery was in a sustainable condition.

Data/Research/Assessment Process

The 2006 MSA Reauthorization was predicated on having the necessary data, research and assessment processes in place and operating. This is simply not the case in the Southeast:

- ACL monitoring—still having difficulty tracking commercial landings in a timely manner and recreational landings continue to be a challenge. This results in continued ACL overages.
- Biological samples—insufficient fish sampled for length, otoliths for aging and reproductive condition. Staff resources to read otoliths and process the reproductive samples are severely limited. This results in more uncertainty in stock assessment results.
- Assessments –not enough stock assessments in a timely manner. This results in delays to increases and/or decreases that may be necessary in management limits and regulations.

A potential solution to ACL monitoring would be to fully implement ACCSP Quota Monitoring in the Southeast based on state landings as is done from North Carolina northwards. Additional funding should be provided to the states to collect biological samples and improve their monitoring of commercial and recreational landings.

Flexibility in Rebuilding Overfished Stocks

- Current rebuilding requirements include an arbitrary time period of 10 years and a science-based alternative incorporating productivity.
- Nonsensical outcomes result when stocks approach the mandatory 10-year limit under the unrealistic moratorium terms. A moratorium is required if a stock can rebuild in 10 years with no fishing. If the same stock were just a little worse off to start, such that it would take 11 years to rebuild with a moratorium, that rebuilding time would become 11 years plus a generation. Thus, if a stock gets a little worse off before the need for rebuilding is recognized, the rebuilding plan can be much more liberal and tolerable to fishermen.
- The 10-year rebuilding time-frame does not treat all stocks with varying life histories fairly and adequately. Short-lived stocks can experience several generations in that time, while long-lived stocks may only experience a small portion of a generation.
- Single stock moratoriums in a multi-stock fishery are impractical, unrealistic and result in unnecessary impacts on healthy stocks in the complex.

The South Atlantic Council recommends that the rebuilding time requirement be simplified, by eliminating the arbitrary 10 year requirement and using the current biologically based rebuilding period alternative of Fishing Mortality (F)=0 + 1 generation time for all situations.

FMSY is a Good Target but a Bad Limit

Fmsy is defined as the fishing mortality rate that would, in theory, give the Maximum Sustainable Yield (MSY) from a particular stock year after year.

- Estimating maximum sustainable yield, and the exploitation rate that provides it, is difficult
- The true danger to a fish stock comes when exploitation exceeds the recruitment overfishing level. (Recruitment overfishing is the rate of fishing above which the recruitment to the exploitable stock becomes significantly reduced. It is characterized by a greatly reduced spawning stock, a decreasing proportion of older fish in the catch, and generally very low recruitment year after year.)
- Fishermen perceive or relate to overfishing at the recruitment overfishing level, and are often willing to give up some yield of one stock to preserve access to a broader, multi-species resource. Problems arise, however, when they are forced to endure the very low exploitation rates that are often necessary to achieve MSY on long-lived, slow-growing stocks.
- Stocks rebuild when fishing mortality is reduced below the recruitment overfishing level and recruitment improves even if the exploitation rate is above Fmsy.
- It is unlikely that each stock in a complex can be at MSY simultaneously, despite the best intentions of fishery managers. Even if that were possible, we simply do not know what that MSY level would be. Our best assessments struggle to provide robust estimates of MSY for a single species, but much less so when the interactions between species are considered and addressed.

- The South Atlantic Council's solution would be to amend the Act to set Maximum Fishing Mortality Threshold at the recruitment overfishing level.
- This will allow managers to balance foregone yield (growth overfishing) against social, economic and ecosystem concerns when establishing exploitation targets and preventing overfishing.

Impose Restrictions on Applying Harvest Moratoriums

- Single-species moratoriums in a multi-species complex are impractical, unrealistic and result in unnecessary impacts on healthy stocks (*e.g.*, high level of discards).
- Implementing measures to immediately end overfishing on a single component stock of a complex has undesirable adverse impacts on other species in the complex.
- Moratoriums should be limited to extreme cases where a fishery has not responded to management, and should not be considered in the first effort to recover a newly recognized overfished stock.
- Complete harvest moratoriums should not be implemented if resources are not available to monitor the population when fishery-dependent data are lost due to regulations.
- Due to a lack of adequate fishery-independent monitoring and fishery observer coverage, the South Atlantic Council is faced with no means to remove harvest moratoriums on 4 stocks that cannot be assessed because those harvest moratoriums eliminated the only available data source.

Red snapper is a case where an existing rebuilding plan demonstrated evidence of stock improvement under existing regulations. In fact, recreational and commercial fishermen were experiencing increases in size and abundance that had not been seen in a decade or more. The 2010 assessment verified, in part, the observations of the fishermen that a large year class had entered the fishery. That large year class was the direct result of management regulations that had been in place prior to the moratorium. While those prior regulations were not enough to end overfishing as based on MSY, they were obviously adequate to allow the stock to 'turn the corner' toward recovery, show a gradual increase in spawner abundance, and produce the best year class on record. Although the 2010 assessment alleviate the need for the Council to close large areas to all fishing, it still indicated a very low catch level was needed to end overfishing immediately. Management evaluations indicated that the very low allowable catch would be consumed by the discard losses of red snapper encountered as bycatch as fishermen pursued other species in the complex. Consequently the Council had no choice but to impose a harvest moratorium on red snapper. It has been impossible to convince fishermen that a moratorium was needed when they were experiencing the best red snapper fishing in decades. Particularly, it was difficult to convince them of the inadequacy of the previous regulations that were, to them, responsible for the improvements in stock abundance readily apparent to all. Those regulations reduced fishing mortality, likely ended recruitment overfishing, but fell short of preventing MSY-based overfishing, at least based on the current estimates of abundance and productivity.

Due to this separation between what fishermen are seeing and the regulations the Council is forced to implement in an effort to apply MSY concepts to a poorly sampled multi-species complex, the Council has lost all credibility in a large portion of its jurisdiction. That credibility was hard won and had come primarily from examples in king and Spanish mackerel management. In the mid-1980s the Council had faced similar circumstances with regard to the king and Spanish mackerel fisheries. These fisheries represent the largest single species landings that the Council manages (Spanish and king mackerel ABCs 6.063 and 10.46 million pounds, respectively). Prior to the 1980s, king and Spanish mackerel catches were essentially unregulated. The fishery was sustainable throughout most of its history (there are commercial landings going back to the late 1800s for Spanish mackerel) primarily, as a commercial gillnet fishery with a substantial recreational component. Due to their migratory nature, both king and Spanish mackerel are available during some portion of the year to all fishermen in the South Atlantic. In the summer they can be found as far north as Maine and support important fisheries north of the Council's jurisdiction.

Introduction of airplane reconnaissance and large power-assisted run-around gillnets in the commercial sector in 1970s took advantage of the tight over-wintering schooling behavior exhibited off Florida and greatly increased catches. Harvests by both recreational and commercial fisheries in the 1970s and early 1980s exceeded reproductive capacity and led to overfishing. The South Atlantic Council developed

a plan to end overfishing and Federal regulations were implemented in 1983 to control harvest and rebuild depleted stocks of both king and Spanish mackerel. Management measures developed by the Council for Atlantic migratory group king and Spanish mackerel were very successful in rebuilding stocks, while at the same time the mackerel fisheries remained viable for both recreational and commercial fishermen. Both of these stocks were rebuilt within one generation and neither fishery was placed under a moratorium. The commercial fisheries were closed when the restrictive quotas were met and the recreational fishery remained open under restrictive bag limits. Current assessments indicate both stocks remain healthy and the Spanish mackerel biomass is substantially above MSY.

The mackerel management history indicates that the current red snapper moratorium could and should have been avoided. Some may argue that red snapper is a reef fish and not comparable biologically to the mackerels, when in fact their biological characteristics are very similar. Mackerel are fast growing and mature early. We have documented 4-year old red snapper weighing 17 pounds, which is actually faster growing than the mackerels, and red snapper are mature at age 2, somewhat faster than king and about the same as Spanish mackerel. The significant difference between red snapper and mackerels is the maximum age; red snapper can live into their 50s while most mackerels live half as long.

Prior to the 2006 MSA Reauthorization, the Council could have developed regulations to phase out overfishing over several years, similar to what was done for black sea bass and snowy grouper, by imposing significant reductions in mortality to end recruitment overfishing and continue rebuilding, and in doing so balance the needs of the stock with those of the fishery. It is no longer possible to end recruitment overfishing and allow stocks to begin recovery, while possibly allowing some growth overfishing to continue as a means to potentially offset severe social and economic consequences. As previously mentioned, public faith in the Council process has declined considerably as the red snapper closure has dragged on, and confidence in the management system remains low today.

There is also the question of missed opportunities that sometimes arise when severe management restrictions are needed. Instead of a moratorium the Council, before the 2006 Reauthorization, could have implemented the significant reductions in mortality to end recruitment overfishing and continue rebuilding, designated an MPA in the heart of the red snapper fishery as an insurance policy that would have protected a portion of that large year class as well contributing the same protections to a myriad of other species, and closed the fishery during the spawning months as red snapper form significant spawning aggregations. Those options would have been much more palatable to the public in the context of a complete closure. Furthermore, the fishery-dependent data stream critical to the last assessment would have continued allowing the next assessment to be done 2-3 years earlier than waiting on the new fishery-independent survey to be developed and have a time series long enough to discern population differences.

Allow MSY Specification for Stock Complexes

- Mixed-species fisheries cannot be adequately managed by simplistic application of single-stock principles such as MSY.
- Stocks in a complex will vary in abundance over time and it is impossible for all to be at high abundances at the same time.
- We lack both the ecosystem and fishery data necessary to attempt to estimate multi-species MSY levels for species complexes.
- Desired fishery yield should be specified for overall complexes, while allowing individual stocks within the complex to experience normal variability in abundance from year to year.
- The South Atlantic Council asks that the challenges of managing multi-species fisheries be acknowledged, and that the Act remove the expectation that all stocks can be managed at MSY at the same time.

Do not Require ACLs for Unassessed Stocks

- Basing ACLs for unassessed stocks on a quantitative portion of historical landings under the guise of the precautionary principle results in bogus ACLs with scant scientific basis.
- ACLs derived from catch may be artificially low, decreasing fishery yield, or too high, posing risk to the stock.

Neither scientists nor managers can make informed recommendations without legitimate assessments because historical landings are uninformative for estimating stock abundance.

Challenges

The Snapper/Grouper fishery in the South Atlantic poses the most significant challenges for the Council. The Coastal Migratory Pelagic Fisheries have been on autopilot since the late 1990s (king mackerel showing lower recruitment recently but the assessment begins in December of this year) and the dolphin and wahoo fisheries are cruising along without any major concerns. But the dolphin (Mahi Mahi) fishery has raised discussion in the context of fisheries that exist almost as annual crops but not quite. Ninety-seven percent of the dolphin are caught at age 1 and they only live to 4 years of age. If there could be some clarification if a species with these biological traits could be considered an annual crop that would be helpful.

The Snapper/Grouper fishery is composed of 60 species with varying life history characteristics, catchability and depth preferences.

Examples of stated problems from independent reviewers as part of the NOAA Data Review of the SEFSC

Data currently used in assessments, for most of our assessed species, are deficient in both quality and quantity for producing robust assessments. One of the reviewers from the Data Review for Gulf, South Atlantic and Caribbean Councils conducted by the Southeast Fisheries Center (SEFSC) this past summer indicated that: "In general, sample sizes for age information, in both commercial and recreational fisheries, in all southeast regions, are smaller than what would be optimal for age-structured assessments of even the primary species. In some cases, they are truly limiting the SEFSC's ability to conduct age-based assessments. One major concern that needs to be addressed is the minimum sample sizes needed to represent the age distribution in the catch in a statistically reasonable manner." Confounding this problem, the SEFSC simply does not have enough personnel to process age samples and in some instances hard parts used in age determination are subsampled and the remainder archived for possibly future analysis. "The Center's ability to process biological samples is on really tenuous grounds, and in some cases it is a lack of personnel that prevents the processing of archived and even contemporary samples. Processing of biological samples is an essential function for stock assessments, and these positions need to be secure to insure the availability of qualified staff (Reviewer #2, Data Review, SEFSC)."

SEFSC Facing Many Challenges

- (1) Two SEFSC Laboratories are successful at aging some species, however, species-specific aging workshops are needed to increase accuracy and precision for estimated ages.
- (2) Age validation studies are needed.
- (3) Current staffing levels are insufficient to meet workload demands.
- (4) Dependency on extramural grant funding creates high turnover rates and valuable time is spent retraining new employees.
- (5) Need for increased reproductive sampling across the Center's entire jurisdiction.

Challenges in the Recreational Fishery

- (1) Coarse spatial resolution of the data.
- (2) Large uncertainty in the estimates of effort.
- (3) Lack of biological samples (length, weight and especially hard parts for aging).
- (4) Uncertainty in discard estimates.
- (5) Complete lack of biological data for discards
- (6) Not all discards are related to minimum size.

The recreational fishery can account for 50 percent or more of the total landings and discards for many reef species, and recreational discards may be 2 to 3 times the landings for some fisheries.

Fishery-Independent Data in the South Atlantic

The paucity of the fishery-independent data, especially in the South Atlantic and Caribbean was a frequent theme throughout the Data Review meeting.

The precision and accuracy of stock assessment results are greatly improved with the inclusion of reliable fishery-independent indices of abundance. Generating such indices should be a major focus for efforts designed to improve data collection and quality for stock assessments. A well-designed coast-wide fishery-independent survey could provide indices of abundance, age and length information, and updated life history information while also informing selectivity, spatial effort and movement

of stocks (Reviewer #3). For the surveys currently conducted, small sample sizes and high variability in the surveys are currently causing large problems for stock assessments (Reviewer # 3).

Four of the 6 Southeast Area Monitoring and Assessment Program (SEAMAP) surveys in the South Atlantic do not target federally managed species and are not used in any assessments (reviewer #3) However, this year's Spanish mackerel assessment used an index from SEAMAP.

The MARMAP and Southeast Fisheries Information System (SEFIS) fishery-independent sampling use fish traps for their primary sampling methodology. There are limitations to trap surveys that have not been addressed: differential catchability at size and age, ontogenetic movements as some species move to deeper water environments where traps are rarely fished, a large number of South Atlantic reef species that are not trappable on a regular basis, and traps that cannot be deployed in high velocity currents that exist in much of the South Atlantic. The commercial and recreational fisheries are hook and line fisheries, and recreational and commercial fishermen have concerns about the validity of trap catches versus hook and line. An example of this is illustrated by several cooperative research programs being conducted for red snapper where hook and line gear is being used as the mode of sampling. Most of the day trips in that survey caught more red snapper than the MARMAP trap survey caught in its 30 years of sampling.

Conclusion

The South Atlantic Council has faced significant challenges implementing the statutory mandates resulting from the 2006 MSA Reauthorization, particularly, in ending overfishing immediately. The 2006 Reauthorization is predicated on the assumption that each Council has the necessary data to meet the statutory requirements. That is clearly not the case for the Southeastern Councils in general and the South Atlantic specifically. We have implemented substantial reductions in ACLs for some species and essentially closed the most important fishery, red snapper, along the east-central Florida through Georgia based on ending overfishing. This has come at a high cost to recreational and commercial fishermen and the business related infrastructure that they support. Based on management successes in the past, the Council believes that there is ample evidence to support extending the time-frame to end overfishing without impacting rebuilding schedules. The original Magnuson-Stevens Act was founded on the regional differences among the Council jurisdictions. The "one size fits all" approach in the 2006 Reauthorization has violated that regional component. We respectfully ask that you give due consideration to our requests so that all fishermen in the South Atlantic will benefit from your decisions.

Thank you for allowing me to appear before you on behalf of the Council.

Senator BEGICH. Thank you very much.

Our last person to testify, thank you for being here. If I pronounce it right, is it "Far-SHET-ee"?

STATEMENT OF CARLOS FARCHETTE, CHAIRMAN, CARIBBEAN FISHERY MANAGEMENT COUNCIL

Mr. FARCHETTE. Yes, sir.

Senator BEGICH. Thank you, Mr. Farchette, for being here, Chairman of the Caribbean Fishery Management Council.

Mr. FARCHETTE. Good morning, Honorable Senator Begich and members of the Committee on Commerce, Science, and Transportation. My name is Carlos Farchette and I represent the U.S. Caribbean Fishery Management Council, encompassing the Commonwealth of Puerto Rico and the U.S. Virgin Islands, St. Thomas, St. John, and St. Croix. It is my pleasure to address the request for comments on issues related to the Southeast Regional perspectives on the reauthorization of the Magnuson-Stevens Act.

First I would like to endorse the letter dated November 8, 2013, submitted to Honorable Doc Hastings and Honorable Mark Begich by the eight regional fishery management councils, referring to the consensus statements on priorities for the reauthorization of the MSA.

Second, we want to present some topics specific to the U.S. Caribbean. The U.S. Caribbean is considered a data-poor area. This constitutes a major challenge to determine overfishing limits, annual catch limits, among others. The development and implementation of OFLs and ACLs for our fishing grounds is very difficult to achieve when you have multiple species and very little trustworthy information for the species involved. This calls for more funding or adoption of different strategies and methodologies to obtain the information needed for establishing these parameters.

Due to budgetary situations faced at the national level, substantially increases in the funds for scientific studies is probably not on the horizon. Therefore we will need more flexibility in setting these levels of fishing. Presently the law dictates that when data is scarce the buffer between OFL and ACL should be larger. This causes unnecessary economic hardships to our fishers.

Actually, what you hear most from local fishers is a question: Why do we have to be penalized for the inability of the government to obtain and process statistical data on time to avoid these unfair closures? Hence, we want to emphasize the need to amend the MSA to provide for flexibility in the process to determine the levels of fishing that will provide for sustainability of the resource with a minimum amount of economic burden to the fishing industry, both recreational and commercial.

Another point we want to bring to your attention is the need to effectively include information and scientific assessment of the socioeconomic component of the ecosystem-based management approach. The CFMC is moving toward the implementation of island-based FMPs. The idea is to consider island areas as a whole for fishery management purposes. This will focus management actions specific for each area, rather than adopting a blanket set of management measures across the entire Caribbean EEZ as we do now, which results in unfair treatment of some of the island communities.

As an example, while in the St. Thomas-St. John area the fishing is mostly market-driven, the measures applied to avoid overfishing of species in Puerto Rico are also imposed to St. Thomas-St. John fishers, creating an unnecessary economic hardship to the local fishers of these islands.

We would like to receive clarification on the role of councils in international fisheries affairs. Historically our council has as one of its original objectives the promotion of pan-Caribbean management strategies, given our dependence on fisheries management of shared stocks from upstream islands. Therefore we have participated in the delegation of Western Central Atlantic Fisheries Commission and other international bodies that oversee Caribbean Basin fisheries. If the MS reauthorization addresses international issues, we would like to see some language as to the role of our Council in international bodies.

Finally, we believe that the MSA is working and may only need fine adjustments, but the above-mentioned issues with some of its requirements should be considered to provide the necessary flexibility in its implementation process, especially in the Caribbean region.

Thank you very much for this opportunity to submit our comments.

[The prepared statement of Mr. Farchette follows:]

PREPARED STATEMENT OF CARLOS FARCHETTE, CHAIRMAN, CARIBBEAN FISHERY
MANAGEMENT COUNCIL, SAN JUAN, PUERTO RICO

It is my pleasure to address the request for comments on issues related to the Southeast Regional Perspectives on the Reauthorization of the Magnuson-Stevens Act (MSA).

First, we would like to endorse the letter dated November 8, 2013, submitted to Honorable Doc Hastings and Honorable Mark Begich by the eight Regional Fishery Management Councils, referring to the consensus statement on priorities for the reauthorization of the MSA.

Second, we want to present some topics specific to the U.S. Caribbean:

- The U.S. Caribbean is considered a “data-poor” area. This constitutes a major challenge to determine overfishing limits (OFLs), annual catch limits (ACLs), among others. The development and implementation of OFLs and ACLs for our fishing grounds is very difficult to achieve when you have multiple species and very little trustworthy information for the species involved. This calls for more funding or adoption of different strategies and methodologies to obtain the information needed for establishing these parameters. Due to the budgetary situation faced at a national level, substantially increasing the funds for scientific studies is probably not in the horizon. Therefore, we will need more flexibility in setting these levels of fishing. Presently, the law dictates that when data is scarce, the buffer between OFL and ACL should be larger. This causes unnecessary economic hardship to our fishers.

Actually, what you hear most from local fishers is the question “why do we have to be penalized for the inability of the government to obtain and process statistical data on time to avoid these unfair closures? Hence, we want to emphasize the need to amend the MSA to provide for flexibility in the process to determine the levels of fishing that will provide for sustainability of the resource with the minimum amount of economic burden to the fishing industry, both commercial and recreational.

Another point we want to bring to your attention is the need to effectively include information and scientific assessment of the socio-economic component of the ecosystem-based management approach.

The CFMC is moving towards the implementation of island-based FMPs. The idea is to consider island areas as a whole for fishery management purposes. This will focus management actions specific for each area, rather than adopting a blanket set of management measures across the entire Caribbean EEZ as we do now, which results in unfair treatment of some of the islands communities. As an example, while in the St. Thomas/St. John area the fishing is mostly market-driven, the measures applied to avoid overfishing of species in PR are also imposed to St. Thomas St. John fishers, creating an unnecessary economic hardship to the local fishers of these islands.

- We would like to receive clarification on the role of councils in international fishery affairs. Historically, our council has as one of its original objectives the “promotion of pan-Caribbean management strategies,” given our dependence of fishery management of shared stocks in upstream islands. Therefore, we have participated in the delegation of the Western Central Atlantic Fishery Commission and other international bodies that oversee Caribbean basin fisheries.

If the MSA reauthorization addresses international issues, we would like to see some language as to the role of councils in international bodies.

Finally, we believe that the MSA is working and may only need fine adjustments, but the above mentioned issues with some of its requirements should be considered to provide the necessary flexibility in its implementation process, especially in the Caribbean region.

Thank you very much for this opportunity to submit our comments.

Senator BEGICH. Thank you very much.

Thank you all for your testimony. What I’m going to do, it’s a 5-minute round. I’ll start with Senator Rubio, then I’ll go to Senator Nelson, then Senator Scott, then I’ll do the completion.

Senator Rubio.

Senator RUBIO. Thank you, Mr. Chairman.

My first question is directed at both Dr. Crabtree, but also to Mr. Hartig. One of the things I hear from constituents who like to fish recreationally in salt water is that they'd like to see not only longer fishing seasons, but seasons that are more predictable and consistent seasons that they can count on from year to year. Certainly hunters have a very good idea of when their seasons will start and when they'll end.

What is it about the Federal fisheries management under MSA that makes it so difficult to establish a recreational fishing season and to effectively manage the sector during the season?

Dr. CRABTREE. Well, thank you for your question, Senator Rubio. I think the area where we have historically had the most problems is in the Gulf of Mexico with the recreational red snapper fishery. One of the messages that the council, we've heard loud and clear over the last couple of years, is not only the desire for more days, but the desire for stability and predictability, as you say. We've heard that.

So in response to that, after this year's stock assessment was completed the council reviewed a number of options for setting the total allowable catch levels for the Gulf. They elected to try and set the total allowable catch at a constant level over the next 3 years, with the goal of trying to bring some stability to the fishery. So we were able to raise the quotas by about a million and a half pounds this year and we will have stable catch levels for the next 3 years.

One of the things that's resulted in changes taking place in April or May for the last couple of years with red snapper has been that the quotas have been going up each year and we've been going through a rulemaking in the spring to set the quota, and that's resulted in last-minute changes to the fishery. This year the quotas are in place now, and so we presented analyses at the last Gulf council meeting indicating a season length for next year of around 40 days, which is an improvement from where we were last year. We hope to get that season announcement out by the end of this calendar year, giving fishermen many months notice as to what the fishing season is going to be for next year.

So trying to bring some stability to the fishery is one of our major goals and we recognize that as something we need to do a better job with in the recreational fishery.

Senator RUBIO. Mr. Hartig, do you have any follow-up on that?

Mr. HARTIG. Yes, thank you, Senator Rubio. From the South Atlantic Council's perspective, red snapper—we're nowhere near where the Gulf is. In fact, the fishery is essentially closed, and it was closed at a time when management controls had shown that the stock was responding to management. So in our case we have allowed a very short season, one 3-day season for the recreational fishery this year and two 3-day seasons last year. But that's not a fishery; that's not something that fishermen can enjoy.

The main thing that impacts the South Atlantic in being able to deal with red snapper is the ending overfishing immediately. That's the main problem.

But for our other species, we are talking about seasons. We're talking about season lengths for black sea bass, having a defined

season for the recreational fishery, once we find out what their catches will be under the new ACL that just doubled. We're also going—we're doing a visioning process. We're inviting fishermen in to tell us, how do you want to manage your species in the future, how do you want to manage your fisheries? We're going to start that this winter. This will be a big way. We want to inform our management based on the fishermen's recommendations.

Now, having said that, the statutory requirements of the Act going into this, we have to tell the fishermen that is what we have to do, but outside of that how do we manage fisheries going ahead?

Senator RUBIO. Mr. Boyd, are the 10-year rebuilding time lines mandated in the last MSA reauthorization working for your councils in the stocks you manage? Wouldn't it make more sense to give your council some reasonable latitude to deal with rebuilding stocks for which the 10-year time-frame simply doesn't make sense?

Mr. BOYD. Thank you, Senator. Yes, that is exactly right. The arbitrary 10-year rebuilding timeframes can put constraints on the Council that cause effects in the socioeconomic communities that are onerous. If we had a little more flexibility to rebuild the stock, say based on stock abundance rather than arbitrary timeframes and arbitrary numbers of fish or pounds, it would give us greater flexibility.

Senator RUBIO. Do you think the Council should be allowed to waive annual catch limits when necessary?

Mr. BOYD. Yes, I think they should.

Senator BEGICH. Thank you very much.

I'd like to go with Senator Nelson.

Senator NELSON. Dr. Crabtree, this is certainly good news on the Gulf red snapper. What do you think would be your advice on the basis of your experience with the stock assessments on Gulf red snapper? How would you suggest to us that we approach Magnuson-Stevens reauthorization in a way that ensures the certainty of data collection for all of the fishery stocks?

Dr. CRABTREE. Well, improving data collection has been something that we've emphasized for the last four to five years in the Southeast. So through part of that process there have been additional funds made available in the Southeast to improving stock assessments. Those have largely gone into improved fishery-independent sampling, both in the Gulf of Mexico and in the South Atlantic area, and we're trying also to move toward some visual censuring efforts in the Caribbean as well.

But I think the key to improving our stock assessments in all of our regions is to focus on fishery-independent surveys, which are done on a systematic basis year after year. That's really been what we haven't had historically in the Southeast. We've made progress over the last decade or so putting some programs in place. We now have visual census programs in the Gulf that we're using and we've recently put some of those in place in the South Atlantic, some long line surveys in the Gulf to sample older red snapper.

But that's really the key to better stock assessments and we need to keep at that, because it's critically important to have these long time series of data for the stock assessments so you can see the trends of abundance as they develop over the years.

Senator NELSON. Just one other question, Mr. Chairman.

Mr. Boyd, how do you think the councils can operate so that—you've got a variety of fish out there. You want to make sure they're not being overfished. You've got the pushes and tugs from your constituencies. You've got the demands coming from commercial, recreational, including the charter boat captains. How do you try to smooth all that out and come out with the right decision?

Mr. BOYD. Thank you, Mr. Chair.

[Laughter.]

Mr. BOYD. Senator, it's very, very difficult. If I said it was easy I wouldn't be truthful with you. The competing interests of commercial versus recreational and the needs of the charter for hire fleet are great. On the one hand, the recreational fisherman is catching his fish. He's going out for an experience, whereas the commercial fisherman is trying to maximize their profitability. The commercial fishermen and the recreational fishermen have a completely different objective. Commercial fishermen want to minimize their time on the water and maximize their catch. The recreational fisherman wants to maximize his time on the water with his family or with friends and isn't as concerned about a maximum catch as they are for a maximum experience.

Senator NELSON. But each needs to make sure there's fish.

Mr. BOYD. But each needs to have fish, yes, sir.

Senator NELSON. Well, good luck and Godspeed.

[Laughter.]

Mr. BOYD. Thank you, sir.

Senator NELSON. I get buffeted by this all the time, as you can imagine.

Senator BEGICH. Thank you very much, Senator Nelson. I will tell you, in Alaska we have one more element called subsistence hunters. So we have three ends. We don't have bookends; we have multiples, so it's very complicated.

But I will say one thing as we move to Senator Scott, and that is in Alaska most of our species are stock assessed every year and it makes a big difference if you can have that frequency, as you were talking about, Dr. Crabtree. So that I'm sure is one of the issues we as a committee will have to address to create some regional balance here and to make sure other areas have this science on a regular basis.

Senator Scott.

**STATEMENT OF HON. TIM SCOTT,
U.S. SENATOR FROM SOUTH CAROLINA**

Senator SCOTT. Thank you, Mr. Chairman, and thank you also for holding this very important hearing today. I certainly have enjoyed the perspectives from the panel. I look forward to asking a few questions.

In South Carolina our economy is driven by tourism in major part. From Myrtle Beach to Charleston to Hilton Head, much of what we see happening in our economy on the coast is due to our history and good food. So our folks are dependent upon bringing good food in on a daily basis. So I wanted to ask just a couple of questions.

Mr. Hartig, I much appreciate your assessment and your emphasis on making sure we consider how current law is working for the fish and the fishermen in the South Atlantic region. The social and economic considerations that you've highlighted are of tremendous concern to South Carolina. Our local chefs rely on access to the freshest local seafood for their menus and their livelihood. More flexibility is needed in crafting remedies for rebuilding overfished stocks to give businesses time to plan and to adjust.

I appreciate the work the South Atlantic Council has done in showing the effectiveness of this approach with certain species. Could you comment further about ways we can build in more flexibility in rebuilding requirements?

Mr. HARTIG. Thank you, Senator Scott. The crux of the problem in the South Atlantic, it's focused primarily on how assessments have done in the past. We had relatively simplistic assessments on the first part of our management history. In about 2000, 2004, we implemented a new SEDAR assessment approach, and about that time we had the next generation of assessment scientists move in and they took this to a different level. They're able to do so much more with so little data, which is good on some sides and bad on others.

But they were able to get pretty much a more accurate picture of the health of our fisheries. We had been going along with the red snapper thinking we were doing the right things, putting in the management measures that were dictated by the assessments, and then all of a sudden to have this out of nowhere, when fishermen are telling us this is the best fishing they've seen for red snapper in decades, that we have to close the fishery. That just didn't work.

The flexibility in ending overfishing is our problem. It's really, in the Southeast it's a problem, but the South Atlantic is particularly impacted by that problem. In order to move forward, some way we have to allow that to be phased in over a longer period of time to take in those socioeconomic considerations that you mentioned.

I'm glad you mentioned the chefs because in Charleston—that's an important part. We're seeing more of those people come to our hearings and give us information: Hey, we need longer seasons so we can plan our restaurant menus to be able to handle these fish that we can get to the people on a regular basis. That's a very important part of what we're looking to.

Senator SCOTT. It certainly feels like the epicenter of activity for us in South Carolina. So thank you for your comments.

Dr. Crabtree, you stressed in your testimony the need for the highest quality fishery science. Pretty much everyone here agrees we need even better data and research to better understand the realities of the stock levels and to set more realistic quotas. The Southeast Region manages more species than any other region in the country, but it is my understanding that it receives the least amount of funding. Can you comment on how determinations are made within the Fisheries Service about how to allocate resources for research and data collection?

Dr. CRABTREE. Well, Senator, I can comment on how we make decisions in the Southeast, but the nationwide allocation decisions are made in headquarters and I wouldn't be the best person to

comment on those. So we can take that for the record and come back for you.

But again, within the Southeast for the last several years we have received increased funding to improve our fishery-independent monitoring. In particular, in the South Atlantic region we have started a new survey over the last few years which is a fishery-independent survey, and it's kind of built off the MARMAP survey that's been run out of South Carolina Department of Natural Resources for some years using trap gear and camera arrays to do fish censuses, essentially.

Those kind of data are really the key to improving our stock assessments. They are general surveys that give you information on all of the species that are out there, too, because you're sampling everything. That's critically important for the South Atlantic region, where we have so many species that are under management.

So we've made some improvements on those surveys and if we can keep those going I think we're going to continue to see improvements in our stock assessments. I agree completely with Mr. Hartig's statements that we have over the last decade changed our assessment process through the SEDAR process. It's much more inclusive now. It's much more sophisticated now. And the science that we have now I think is much better than what we had a decade ago. But the key to continuing to move forward on that are these fishery-independent surveys.

Senator SCOTT. Thank you very much. I certainly would like to hear a response on the funding formulas and how it impacts our areas specifically, realizing that if you have more species to figure out perhaps the funding should be consistent with that. I appreciate the fact that you are not dodging the question, but unable to answer the question, realizing that someone else above you must answer that question.

Dr. CRABTREE. And we'll follow up with you on that, Senator.

Senator SCOTT. Thank you very much.

Senator BEGICH. Thank you very much, Senator Scott. That would be a good question for the record, so we can have that presented to the Committee.

[Please see Senator Scott's question for the record and Dr. Crabtree's response to it on p. 80.]

Senator SCOTT. Thank you very much.

Senator BEGICH. We appreciate that.

Let me say, I have a few questions. Again, I appreciate my colleagues from the region. It's their region in a lot of ways, even though we have a role nationally. But I want to give them as much latitude for the questions.

But if I can, first, Mr. Farchette, if I could just ask you a quick question. You kind of indicated it, but I just want to follow up. You have kind of a unique situation. If I remember the numbers right, you have well over 130, 140 different species. You are international water. You've got all kinds of issues that complicate how to manage there.

Can you just give me a sense what and how you work with international bodies? I know from an Alaska perspective, I know we have international bodies. Russia we have to deal with because they steal our crab. I can say that. So we have our own situation

there. And then they call it Alaska crab. I'm sure I'll now hear from the State Department, but the facts are the facts.

But tell me how it works in your region?

Mr. FARCHETTE. Well, we're working with about 26 island nations and we are trying to come up with a consensus on having—take for instance, we have working groups developed for the spiny lobster, where we could have management regulations, because most of the islands do not have fisheries management plans. So we're working with them to help them develop fishery management plans.

We're also working together to protect spawning aggregations, identify and protect spawning aggregations, seasonal closures, so it'll be uniform around all the island nations.

Senator BEGICH. Do they seem receptive to this?

Mr. FARCHETTE. Most of them are. However, some of them would not—like some have a 2-month closed season for spiny lobster. Most of them have 4 months and they don't want to change that.

Senator BEGICH. They don't want to change it. But generally you're feeling like there's cooperation and an understanding that if they don't do this in the long term it could be very problematic for the fisheries?

Mr. FARCHETTE. Yes. But I think that there is cooperation between all of us. I think it's getting better.

Senator BEGICH. Very good. Thank you very much.

Let me ask to all of you or whoever would like to answer, kind of my commentary there on stock assessments. We're fortunate to some degree in Alaska because we do these on a fairly annual basis, but we also have a sizable amount of State participation in that. As you know, our observer program, for example, was predominantly funded by the State because we just wanted to manage our fisheries so we wouldn't have a problem.

Give me your sense of—put funding over here for a second. I think I know the answer to this, but I want it I guess on the record. More frequent stock assessment would be a data point that's necessary for a good solid baseline; is that an accurate statement that I'm making for all of you, depending on what the species is? But I'm assuming for most species you want more frequency of stock assessments. Is that a fair statement?

Mr. HARTIG. Yes.

Senator BEGICH. Do you think—one of the issues that I find interesting, no disrespect to my friends at NOAA, but one of the areas that I think we have to look at—I think Senator Scott brought it up, I think Senator Rubio brought it up and Senator Nelson to a certain degree—that is, it's important to understand the fish, but it's also to understand the connection on shore, all the way to, for example, from the water to the plate, and understand that economic impact.

So when you're making a decision of closing or not closing or extending or not extending, do you think we do enough in our analysis when we make these from the Federal Government standpoint of saying this is an area that we have to consider? Are we putting enough of that economic analysis into this mix? I have my opinion, but I'm curious.

Who would like to answer that? Mr. Hartig, I can see; I can sense it from you. I think I know, but I want to hear it because I know in Alaska we have the constant discussion about, OK, the fish value is X, but really when you figure out equipment and shoreside and all these other pieces, there are other pieces. It was a battle we just had over halibut commercial versus halibut charter catch and what does that mean. Can you give me your opinion?

Mr. HARTIG. Yes. I think Roy could give you the details on exactly what economics goes into the management plan. But from my perspective, going through this process—this is my second time around on the Council. I've been involved in this process since, at some level, since 1976. The economics is truly lacking when we look at the problems, when we close a fishery in particular. The impacts of all the business related not only to the fishermen, but the business related to the fisheries are severely impacted.

We've lost a number of businesses due to red snapper. We've lost a number of charter boats, head boats. Nobody ever follows up on that.

Senator BEGICH. That's commercial impact, right?

Mr. HARTIG. Yes, absolutely, commercial and recreational impact.

Senator BEGICH. And it's not just one person there that weekend doing this. It's long-term. Some of these are long-term businesses, right?

Mr. HARTIG. Yes. You lose a head boat, you lose opportunities for fishermen. At that level that they can afford to go fishing, if they lose a head boat they can no longer make that trip. That's taken away from them because they no longer have a platform that they can afford to go and reap the benefits of harvesting South Atlantic species.

Senator BEGICH. Dr. Crabtree, if you want to respond, then Mr. Boyd, and then—and I'll see if—OK, go ahead.

Dr. CRABTREE. Well, I would agree with Ben that there is a need for more economic, socioeconomic analyses. I think we are doing better at that today.

Senator BEGICH. Do you think—if I can interrupt you for a second, do you think you have the expertise within the agencies to do that?

Dr. CRABTREE. I think we have the expertise. I think we're often lacking in the data to do it. With the number of actions that we have with all three councils, we're sometimes lacking the manpower to do as much as we would like to.

We have in the Southeast, particularly because of the importance of recreational fisheries, we have a lot of allocation decisions that we struggle with. Even within the recreational fisheries, there are allocation issues with charter boats and private sector fishermen. At least one part of making allocation decisions is looking at economics and net benefits to the Nation and those types of things. While we are collecting more data now on that than we have in the past, we often don't have as much information as we would like to make those decisions.

I think we put all the emphasis in recent years on improving our stock assessments, but I think the socioeconomic component of that is important. We need to make sure it's on our radar screen.

Senator BEGICH. If I can leave you with a thought, and Mr. Boyd, if you would respond, but Dr. Crabtree, but not for right now, but maybe you could give to the Committee some thoughts on what is that kind of data you're looking for and where might that come from, that would help us maybe think about how when we look at this legislation, is there things we could do to improve access or funding or other pieces to the equation. Would you mind considering that thought and bring back to the Committee at some point? Would that be OK?

Dr. CRABTREE. Certainly, Senator. I'd be happy to.

Senator BEGICH. Thank you very much.

Mr. Boyd.

Mr. BOYD. Yes, sir. I would just echo what Ben and Roy said. The socioeconomics are vitally important. I just attended our socioeconomic science and statistical committee meeting this last week and I saw about 15 different scientists, economists, charter boat captains, and some recreational fishermen, actually grapple with how you manage a fishery and how do you understand the socioeconomic impact of these decisions.

They came out with some recommendations, some motions that are going to go to Council in February, to help us make allocation decisions or to not change allocations in any way. So it's very, very important to have that data. I think that the data is limited at this point in time, like Dr. Crabtree said, and we do need more.

Senator BEGICH. I appreciate that. This is one area that's of strong interest to me because it affects commercial, but it affects recreational significantly, and in my State subsistence, too, because if they don't fish then there's an economic impact to them that they will have to endure, not by—they don't get a choice. They have to, because it's food on the table and if they can't fish for subsistence purposes that means they do not have food on the table. That's their grocery store. When they open up their door, that's it. It's right outside the door. So it's critical.

So I appreciate these comments. I do have additional questions. I'll submit those for the record. But I do want to thank this first panel for attending, being part of our hearing and our series of hearings as we move forward on the reauthorization. Thank you all very much. And we'll dismiss you and have the next panel line up, and staff will do the magic moving of the names and all kinds of stuff here.

[Pause.]

Senator BEGICH. If you would go and have a seat, those for the next panel, as they're laying out the name tags, that would be great.

[Pause.]

Senator BEGICH. What we'll do is as people are getting situated there, Senator Rubio has been called to the Foreign Affairs Committee, I believe. So let me have him say a few comments, then we'll go with the panel.

Senator RUBIO. Thank you. I'm reminded what my colleague from Florida, Ileana Ros-Lehtinen, says: in the Senate, it's Foreign Relations; in the House it's Foreign Affairs. So we have relations, they have affairs, I guess is her joke, not mine.

Anyway, the meeting starts at 11:40, so I'm going to try to run over there, do my bill, and get back in time. But I've read all your testimony, met with all of you before, and know exactly what you're going to do. And I feel terrible about not being here for your testimony. I hope you understand that. The bill has my name on it; I need to be there to present it. And I'll try to get back here as soon as I can.

Senator BEGICH. Thank you very much.

I know, Mr. Windes, you have a 2 o'clock flight. So what I'm going to do in the order, I'm going to kind of have you go first. Then I'll come back over here, if that's OK. Not that we will be here until 2 o'clock, but I know—but I just give you as much flexibility as possible. But again, I appreciate Mr. Windes here, Commissioner, District Five—Is it the "Oakaloosa"?

Mr. WINDES. Okaloosa—

Senator BEGICH. I'm glad you said it.

—County, State of Florida, and the owner and operator of Sunrise Charters. We thank you for being here. We have a big operation in Alaska of charter fishermen. So we understand your business a great deal. Please.

**STATEMENT OF HON. KELLY WINDES, COMMISSIONER,
DISTRICT FIVE, OKALOOSA COUNTY, STATE OF FLORIDA,
AND OWNER-OPERATOR, SUNRISE CHARTERS**

Mr. WINDES. Thank you very much. Thank you, Mr. Chairman, Committee members. It's my privilege to be here. I appreciate the opportunity to share my views. My name is Kelly Windes. I'm a third generation boat captain fishing out of Destin, Florida. That's in the northwest part of the state between Panama City and Pensacola.

Our coastal community is highly dependent on the tourism. As we all know, the fishing is a luxury item, so I'm mostly interested in the economic side of this, as have some of the previous speakers.

I've been in the business about 40 years. I've participated in the commercial sector about half the time. The commercial fishing where we are is more of a multi-day endeavor, suitable for the young and hardy. I also have the privilege of serving on the Okaloosa County Board of Commissioners, District Five.

These remarks that I've prepared are not intended to diminish any sector's advantage that they may enjoy, but my hope is that these remarks may lend to equalizing the playing field to some extent.

In regards to the progress made to date by the Magnuson-Stevens Act, I would say in general that the Act was certainly necessary, has basically had substantial accomplishments, and enjoyed some successes. I would say there's room for improvement in management policy by the National Marine Fisheries.

Of particular concern to me is the red snapper fishery. There are more and bigger red snapper in the Gulf than when I was fishing as a kid. Yet we are allowed to catch fewer and fewer every year. There is always a reason why we are further restricted. The latest reason is, well, the fish are bigger.

Surely, after all these years of sacrifice, we could enjoy a little of the success. I believe that the Act refers to economic impact. We

see very little consideration in this area. I was happy to see some of the other speakers repeat this.

I would say that one of the biggest problems in the implementation is the lack of fair and equitable policies within the various sectors. The strategy, it seems to the fishermen, has been to divide and conquer the fishermen. Special consideration may be given to one sector and the other sectors feel shortchanged. In general, it's the charter industry, or fare-carrying, versus the commercial fishermen versus the recreational or truly private sector, followed by the shrimpers versus all the fishermen.

This "divide and conquer" attitude has worked fine for the bureaucrats that run the system and pretty well for the commercial fishermen, but fairly poorly for the other sectors. The commercial fishermen have and enjoy an historical quota, which is a good tool for the few fishermen that have survived. It's good for the market in the sense that all the allowable catch doesn't show up at one time. Fishermen have the ability to be consistent and provide product when it was needed. Commercial fishermen have the flexibility to catch fish year round as the market dictates.

On the other hand, the charter industry has very little consistency. Seasons are different every year. Different species are closed at different intervals each year. The National Marine Fisheries people do not consider consistency in keeping the customer in mind, the importance of it. If we had more consistency, we'd have the ability with advanced notice to somewhat train our customers according to the policy changes.

The best tool I can imagine to mend these discrepancies would be an independent sector for the fare-carrying vessels. These fishermen have been in business for decades and don't have the security that the commercial fishermen enjoy. In the charter boat sector, if the charter boat sector had the same flexibility to catch fish year round that the commercial sector has, it would become much more fair and the "divide and conquer" stigma would be reduced.

Another factor in the setting of the total allowable catch is the term "best available science." This can be most anything the Marine Fisheries wants to use. They determine the amount of fish caught on an annual basis by a random phone survey on owners of everything that floats, whether it fishes or not. Every other management agency uses stamps, endorsements, or licenses for whatever the outdoorsmen are harvesting, for instance deer, duck, salmon, tuna, swordfish, bear, moose, most everything else. There's absolutely no clue on what is being caught by the true private sector recreationally.

These boats tie up in private residents and out of the way locations with not much accountability. The Fish and Wildlife officers are spread way too thin to enforce the guidelines. A license or endorsement system for various species would solve this and the National Marine Fisheries would suddenly have a place to hang their hat and the best available science would be believable.

The fishermen, from their perspective, are not sure that the Marine Fisheries wants the more credible system and better information so they can make assumptions that make results more to their liking. This is strictly a fisherman's perspective.

As far as the tools for regulations go, I would be in favor of a more regional management policy. The Gulf of Mexico has areas that produce different quantities of fish. In the fisheries management business, the "one size fits all" method is simply not the best approach. If the Gulf was divided into zones, either by states or geographical boundaries, policies would be more targeted and more effective, not to mention more fair. I was most pleased to hear Dr. Crabtree's indication that that's on the table.

The fishermen have learned over the past 20 or so years that we must be aware and diligent to protect our marine resources. We would like to do so under a not so punitive situation. For years and years we have been told to cooperate and things will get better. We have seen not much of this. Our seasons continue to get shorter every year while our customers suffer along with the fishermen. This could be done more fairly if the policymakers will listen.

In summary, I think there needs to be language that identifies and separates the charter for hire sector from the true private boat recreational sector. Charter for hire is restricted by moratorium while private recreational continues to have explosive growth. The proportions of this catch that we share is getting less and less for the business, the charter business, and more in favor of the private. The playing field should be leveled a little bit.

The access loss in recreational fisheries is a management failure, not an allocation failure. According to NMFS, this sector has over-fished nine of the last ten years. Commercial fishermen have a modern management system by way of electronic reporting. In this day and age, we should go with our strengths and implement accountability and more certainty in the recreational reporting process. At the very least, let's determine how many boats are actually fishing. At present, anything that floats catches snapper according to the National Marine Fisheries. At present, a random phone survey is used. This is archaic, inaccurate, misleading, and unfair to coastal communities, who depend on the economic benefits, not to mention the deterioration of tradition, history, and pride in the industry.

The ten-year rebuild time for fisheries is unfair, given the fact that there are little or no set stock assessments and very poor tracking of recreational harvest levels. To relax this accelerated time-frame would give the National Marine Fisheries more latitude and ensure a more reasonable and fair result for fishermen and local economies.

I am most appreciative for the opportunity to express my views. Hopefully, some of these recommended changes can be implemented in order to reduce the animosity between fishermen and allow coastal communities to prosper and not be penalized unnecessarily by policy.

Thank you very much.

[The prepared statement of Mr. Windes follows:]

PREPARED STATEMENT OF CAPTAIN KELLY WINDES, DESTIN, FLORIDA

My name is Kelly Windes. I am a third generation boat captain, fishing out of Destin, FL. I am fishing now primarily in the charter boat industry, although throughout my 40 plus years in the business I have participated in the commercial sector for about half the time. The commercial fishing is more of a multi-day en-

deavor, suitable for the young and hardy. I also have the privilege of serving on the Okaloosa County Board of County Commission (District 5).

In regards to progress made to date by the Magnuson-Stevens Act, I would say in general that the act was certainly necessary, and has basically had substantial accomplishments. I would say that there is room for improvement in management policy by the National Marine Fishery.

Of particular concern is the red snapper fishery. There are more and bigger red snapper in the Gulf than when I was fishing as a kid, yet we are allowed to catch fewer every year. There is always a reason why we are further restricted. The latest reason is "well the fish are bigger now!" Surely after all these years of sacrifices we could enjoy a little success. I believe that the Act refers to economic impact. We see very little consideration in this area.

I would say that the biggest problem in the implementation is the lack of fair and equitable policies within the various sectors. The strategy has been to divide and conquer the fishermen. Special consideration is given to one sector and the other sectors feel short changed. In general, it's the charter industry (fare carrying) versus the commercial fishermen versus the recreation or private sector, followed by the shrimpers versus all fishermen. This divide and conquer attitude has worked fine for the bureaucrats that run the system and pretty well for commercial fishermen, but poorly for everyone else!

The commercial fishermen have "historical quota," which is a good tool for the few fishermen that have survived. It is good for the market in a sense that all the allowable catch doesn't show up at one time. Fishermen have the ability to be consistent and provide product when it is needed. Commercial fishermen have the flexibility to catch fish year-round as the market dictates.

On the other hand, the charter industry has very little consistency. Seasons are different every year. Different species are closed at different intervals each year. The National Marine Fisheries people have no idea about consistency and keeping the customer in mind. They get paid every two weeks no matter what the weather. They don't have to produce a product or satisfy a customer to make a living!

The best tool I can imagine to mend these discrepancies would be an "independent sector" for fare carrying vessels. These fishermen have been in the business for decades and don't have near the security that the commercial fishermen have.

If the charter boat sector had the same flexibility to catch fish year-round that the commercial sector has, it would become much more fair and the divide and conquer stigma would be reduced.

Another factor in the setting of the "total allowable catch" is the term "best available science." This can be anything the National Marine Fisheries want to use. They determine the amount of fish caught on an annual basis by a random phone survey on owners of everything that floats, whether it fishes or not! Every other management agency use stamps or endorsements to determine how many hunters are harvesting what. Look at deer, ducks, salmon, tuna, swordfish, bear, moose, most everything else. There is absolutely no clue on what is being caught by the private sector. These boats tie up at private residences in out of the way locations with no accountability. The fish and wildlife officers are spread way too thin to enforce the guidelines. A license or endorsement for various species would solve this and National Marine Fishery would suddenly have a place to hang their hat and the best available science would be "believable." The fishermen believe that National Marine Fishery does not want a more credible system so they can make assumptions that make results more to their liking.

As far as tools for regulations go, I would be in favor of a more regional management policy. The Gulf of Mexico has areas that produce different quantities of fish. In the fisheries management business, the one size fits all method is simply not the best approach. If the Gulf was divided into zones, either by states or geographical boundaries, policies would be more targeted and more effective, not to mention more fair.

I am most appreciative for the opportunity to express my views. Hopefully some of these recommended changes could be implemented in order to reduce the animosity between fishermen and allow coastal communities to prosper and not be penalized unnecessarily by policy.

The fishermen have learned over the last twenty or so years that we must be aware and diligent to protect our marine resources. We would like to do so under a not so punitive situation. For years and years we have been told to cooperate and things will "get better!"

We have seen none of this, our seasons continue to get shorter every year while our customers suffer along with the fishermen. This can be done more fairly if the policy makers will listen.

Senator BEGICH. Thank you very much for your testimony. Just before we go to Mr. Brownlee, let me ask Senator Blumenthal, who's joined, if he has any quick comment. Then we'll go right to you.

**STATEMENT OF HON. RICHARD BLUMENTHAL,
U.S. SENATOR FROM CONNECTICUT**

Senator BLUMENTHAL. Thank you. Thank you, Mr. Chairman. I really just want to comment to thank this panel and the previous panel, as well as yourself, for having this hearing. I think everybody involved, anybody with the slightest exposure to this system, would agree that the current system is not ideal. So I accept the criticism that you've just made, Mr. Windes, and I hear much the same kind of comments from people in the Northeast. So I think there's a common national interest here in trying to improve this system, make it work better, and make it take account of what some of the previous witnesses have said in respect to habitat, climate change, new technology. I think the system can benefit from the kind of review that Chairman Begich is providing here, and I thank him again for that.

Senator BEGICH. Thank you very much, Senator.

Let me go to, again, Mr. Brownlee, Upper Keys Representative, International Game Fish Association. Thank you very much for being here.

**STATEMENT OF JOHN D. BROWNLEE, UPPER KEYS
REPRESENTATIVE, INTERNATIONAL GAME FISH ASSOCIATION**

Mr. BROWNLEE. Good morning. Thank you. I'd like to thank Chairman Begich and Ranking Member Rubio for the opportunity to testify today. As someone who's worked full-time in the recreational fishing industry most of his adult life, I am familiar with the impact the Magnuson-Stevens Act has on my vocation, which also happens to be my avocation. I appreciate being invited to offer comments on the Act's pending reauthorization.

I'm the Editor-in-Chief of *Saltwater Sportsman* magazine, which was a vocal proponent of the original Act back in 1976 and the 200-mile limit. The first version sought to expel foreign commercial fishing fleets from U.S. territorial waters by creating a 200-mile exclusive economic zone. The Act succeeded in moving those foreign fishing fleets far offshore. But since then we have sometimes done a less than stellar job of managing our own domestic commercial fleet.

We have also failed repeatedly to recognize the significance and the economic impact of the recreational fishing industry. In fact, many of us have spent years trying to get regulators to simply acknowledge that we are just that, an industry. There are 11 million recreational salt water anglers in the United States and these anglers create \$70.3 billion in annual economic output. This directly supports more than 454,000 jobs and generates \$20.5 billion in annual labor income. These are NOAA's own numbers.

I want to make four key points here. You've heard a lot of them already, but the main thing I think we need to focus on with this current reauthorization is looking at economics rather than biology. We've done a very good job managing the biology of certain species.

That's been made clear here today, and I think, Chairman Begich, that's the success that you alluded to. That's absolutely true.

But we have paid a price. I think we've heard repeatedly that small businesses have suffered. I know in Florida mom and pop tackle shops have struggled with this again and again and again. It's everything from large boat companies on down to very, very small stores, restaurants on the waterfront. Small businesses are suffering, and we need to focus on the economics of the recreational fishing industry as we seek what we want to do with the reauthorization this time.

I would add that the recreational fishing industry has changed drastically since 1976. Back then a 25-foot boat was considered big and now you see 40-footers with four engines on them running around all over the place. So it's a very different world. People are passionate about it and they spend a lot of money on it. So the economics of it is of vital importance.

As far as the councils are concerned, I'm a former member of the South Atlantic Fishery Management Council, and we need to give the councils latitude in applying rebuilding time lines. You've heard that again and again and again. That's absolutely key. We also need to give them some latitude in terms of allocation. I was encouraged to hear Dr. Crabtree speak of allocation because that's huge. We have not had changes in allocations between commercial and recreational fishermen in some cases for decades, in most cases for decades.

We need to be able to revisit allocation on a timely basis, on a regular basis, and make appropriate changes given new stock assessments, and of course stock assessments, as other people have alluded to, need to come more frequently and with regularity.

The subject of transferring management to the States is something that we're keenly interested in. We do believe that there is some efficacy in that and that the States do things well that the Federal Government does not do well. I personally believe that the National Marine Fisheries Service is overwhelmed and has great difficulties, it seems obvious, living up to the expectations and the needs of these various fisheries, councils, states, whatever.

I do believe that there is some sense in transferring control over many species to the states or at least to a conglomeration of states, like the Gulf States Marine Fisheries Commission or the Atlantic States Marine Fisheries Commission. The State of Florida, where I'm from, has a stellar reputation as innovators in salt water fish conservation, and I think that some of that model could be applied across other states who also have a good history of management in the past.

The last thing I would say is we need to count fish in a realistic way. Someone brought up Section 407 of the Act. That says that we need to determine absolute numbers of red snapper, and the councils struggle with this. They have to track, attempt to track, the recreational quota by attempting to count absolute numbers of fish. I was fortunate enough to know the late scientist Frank Mather of the Woods Hole Oceanographic Institute, who counted fish his whole life. He was the world's foremost expert on bluefin tuna. Mather used to say that it's folly to try to count absolute numbers of fish because you can't see into the ocean. The only

thing you can do and the only thing that makes sense is to track absolute—I'm sorry—relative abundance of fish, and you do that through frequent stock assessments, measuring indices of mortality, recruitment, that sort of thing, and making an educated guess, and then seeing trends in the fishery over time and making adjustments through size and bag limits.

I'll make that my final point. We would like to see species like red snapper in the Gulf of Mexico get back to a regular season. It used to be approximately 6 months. It would be nice to get back to something approaching that at some point and make adjustments on an ongoing basis in bag and size limits and potentially boat limits, driven by these stock assessments that we hope will be regularly scheduled.

So I appreciate once again the opportunity to testify today and that concludes my comments. Thank you.

[The prepared statement of Mr. Brownlee follows:]

PREPARED STATEMENT OF JOHN D. BROWNLEE, UPPER KEYS REPRESENTATIVE,
INTERNATIONAL GAME FISH ASSOCIATION

Good morning. I'd like to thank Chairman Begich and Ranking Member Rubio for the opportunity to testify today. As someone who has worked full-time in the recreational fishing industry for most of his adult life, I am familiar with the impact the Magnuson-Stevens Act has on my vocation, which is also my avocation. I appreciate being invited to offer comments on the Act's pending reauthorization.

I'm editor-in-chief of *Salt Water Sportsman* magazine, a vocal proponent of the original Act back in 1976. That first version sought to expel foreign commercial fishing fleets from U.S. territorial waters by creating a 200-mile Exclusive Economic Zone. The Act succeeded at moving foreign commercial fishing fleets far offshore, but since then, we've done a less than stellar job in many instances of managing our own domestic commercial fleet.

We have also failed repeatedly to recognize the significance and economic impact of the recreational fishing industry. In fact, many of us have spent years trying to get regulators to simply acknowledge that we are just that—an industry. There are 11 million recreational saltwater anglers in the United States, and these anglers create \$70.3 billion in annual economic output. This directly supports more than 454,000 jobs and generates \$20.5 billion in annual labor income.

But even though we are large in number and an undeniable economic force, we often feel overlooked in the Federal fishery management process. Recreational anglers account for only about two percent of all finfish landings in the US, and fishery managers have historically paid a lot more attention to those who harvest the other 98 percent, the commercial industry.

Recreational anglers have repeatedly demonstrated their willingness to accept restrictions on their catch in the form of size and bag limit reductions, or temporary season closures, when they are scientifically justified. We have always been willing to do the right thing for the fish, when we are shown it makes sense to do so.

Sometimes, however, management makes no such sense and we're still asked to sacrifice. This has manifested itself in several ways. First, there's the issue of allocation between user groups. Unfortunately, some allocations of total allowable catch in mixed-use fisheries between recreational and commercial fishermen were set decades ago and no longer reflect the realities of the times.

We believe it's vital that potential allocation changes be part of the upcoming reauthorization of Magnuson-Stevens, and that the regional fishery management Councils develop guidelines and criteria to consider such reallocation possibilities for mixed-sector fisheries on a regular basis. Allowing allocations to stand for decades untouched and unexamined should be unacceptable.

Recreational fishermen also need relief from the rigid annual catch limits and the accompanying accountability measures, which became part of the Act during its last reauthorization in 2006. The creation of these measures forced the Councils to take drastic action in some circumstances, to meet a previously adopted 10-year rebuilding schedule.

Nowhere has this been more apparent than in the Gulf of Mexico, where the closure of the red snapper fishery due to this inflexible rebuilding schedule has caused great hardship among charter boats and rank-and-file recreational fishermen alike.

The snapper closure was based on outdated and incomplete science, but while the fishery was closed, recreational fishermen reported seeing more red snapper than ever before while fishing for other species.

In an effort to comply with the Act, Gulf fishery managers are attempting to count every red snapper caught by recreational anglers, and then close the fishery if the recreational quota is exceeded. We all know this is an impossible mission, and that the numbers used in these determinations are an educated guess at best, yet they have led to very short red snapper seasons in the past few years since the Council's hands are tied in the matter.

This discrepancy between the reality anglers experienced on the water, and what Federal fishery managers told them was happening, has created widespread cynicism and anger toward the entire management process, a regrettable situation that seems to have no easy solution. We support giving the regional Councils the latitude to institute rebuilding timeframes, based on biological criteria that is defensible, achievable and tied to the biology of the species rather than tied to an arbitrary time frame, so they may act with confidence where good science exists, and proceed with caution where it does not.

There are many instances where science is either outdated, or non-existent, yet annual catch limits are still set. This is of particular concern in multi-species complexes in which many different species of fish might be caught indiscriminately. Under a rigid interpretation of annual catch limits, if an ACL for one species in such a complex is deemed to be exceeded, it could close down all fishing for other species, which may not be over-exploited.

It seems logical to manage recreational fisheries through the use of traditional tools like size and bag limits and seasonal closures, rather than Draconian closures affecting everyone. Recreational fishermen need an open fishing season they can count on, with biologically necessary adjustments in landings made through changes in per-person bag or boat limits in response to timely stock assessments.

NOAA should develop a recreational fishery management system that uses sound scientific data that we now have, and does not penalize the recreational industry in instances where that data is incomplete or missing entirely. NOAA should further be willing to utilize the strengths of individual and collective state management of certain stocks of fish where appropriate.

Managers in my home state of Florida, for example, have consistently proven themselves to be innovators in saltwater fish conservation, and we believe other states, as well as interstate fisheries management commissions, offer a viable and practical alternative to continued Federal oversight of all saltwater fishery management.

Thank you Mr. Chairman.

Senator BEGICH. Thank you very much. Very good testimony.

Mr. JOHNSON. He's the owner and operator of Jodie Lynn Charters. Mr. Johnson.

**STATEMENT OF CAPTAIN ROBERT A. JOHNSON,
OWNER-OPERATOR, JODIE LYNN CHARTERS,
ST. AUGUSTINE FLORIDA; CHAIRMAN,
SAFMC SNAPPER GROUPER ADVISORY PANEL**

Mr. JOHNSON. Thank you, Mr. Chairman, for the opportunity to speak and give my perspective on Magnuson and how it is and isn't working for the fishermen of the South Atlantic. I've been actively chartering commercial fishing since 1980. I am also a current Snapper Grouper Advisory Panel member for the South Atlantic Fisheries Management Council and I have participated in numerous stock assessments on reef fish, and I'm involved in fisheries-independent work with the State of Florida.

What is working with Magnuson? The guidelines provided by Magnuson have ended overfishing in most cases. Many stocks of fish are more plentiful today than at any other time in my career, and the various management councils are to be commended for this accomplishment.

But what is not working? Unfortunately, this accomplishment has come at a huge cost to fishermen and coastal communities.

Fishing fleets in my area have experienced about a 50 percent decline in recent years. The NOAA Marine Recreational Information Program, or MRIP, shows a decline in total recreational trips. Curiously, MRIP also shows an increase in sales, jobs and income. I'm not sure how less trips and effort translates into more jobs and value. It's not what's happening in my area.

In many cases, not only have we ended overfishing, but for some species fishing has been almost entirely eliminated. We had a 3-day recreational season for red snapper in the South Atlantic this year, 3 days.

National Standard 2 states: "Conservation and management measures shall be based upon the best scientific information available." Fishermen refer to this as the "best available science." We have been told in many cases that the data might not be complete, up to date, and there may be very little available, but it's the best we have and that's what we are mandated to use.

How can we mandate the use of inadequate data to make decisions that have such profound impacts on people's lives? How can we afford not to fund research needed to do the job properly? I often use the analogy that if you had to have open heart surgery and your doctor informed you he didn't have instruments or supplies, so you just take a drink of whiskey and I'm going to use a pocket knife, it's the best I've got, it's pretty sharp. It just—it doesn't make any sense. There has to be a minimum standard for data used in stock assessments.

National Standard 4 states: "Conservation management measures shall not discriminate between the residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be fair and equitable to all such fishermen, reasonably calculated to promote conservation, and carried out in such a manner that no particular individual or corporation has excessive share."

I'm not sure how you assign a privilege to anyone without infringing on the rights of another. Fish are a resource that should be managed for the benefit of all citizens, not just a privileged few.

National Standard 8 states: "Conservation and management measures shall, consistent with the conservation required by this Act, take into account the importance of fisheries resources to fishing communities by utilizing economic and social data in order to provide for sustained participation of such communities and, to the extent practical, minimize adverse effects on such communities."

The science and in many cases lack of it is what's driving management. From a fisherman's perspective, there has been little if any consideration given to providing for sustained participation and a minimization of adverse effects on fishermen and their communities. Fishermen have been subjected to lower bag limits, increased size limits, and shortened seasons. Most would be surprised to know the language was even in the document. They feel that Magnuson is being used as a weapon against them, not a plan for their benefit.

The loud and clear message of management that fishermen have heard has been to err on the side of caution, be extremely conservative, and just deal with it.

The South Atlantic is an extremely diverse region. The South Atlantic Marine Fisheries Council is managing 72 species. This diversity requires flexibility. It is impossible to manage such diversity using a one-size-fits-all approach. Fishermen are not asking for unrealistic changes. What they need is a council that has some flexibility in how they set up rebuilding plans. Stringent timeframes for ending overfishing and rebuilding fish stocks are destroying the livelihoods of the very people this management plan was supposed to protect.

The best scientific information available should not be a product of insufficient funding. Fishermen and their communities are hanging on by a thread and we need your help. Participation is on a rapid decline and participation is crucial. Without the involvement of fishing communities, who will make sure the resource is sustainable for future generations?

There are some very smart, dedicated people involved in the South Atlantic Fisheries Management Council. Please give them the flexibility and the financial tools to do their job.

Thank you.

[The prepared statement of Mr. Johnson follows:]

PREPARED STATEMENT OF CAPTAIN ROBERT A. JOHNSON, OWNER-OPERATOR, JODIE LYNN CHARTERS, ST. AUGUSTINE FLORIDA; CHAIRMAN, SAFMC SNAPPER GROUPER ADVISORY PANEL

Thank you for the invitation to speak and give my perspective on the reauthorization of Magnuson and how its implementation has affected the fisherman of the South Atlantic. I am Captain Robert Johnson, owner/operator Jodie Lynn Charters in St Augustine, Florida and have fished the south Atlantic since 1980. Currently, I serve as Chairman of the SAFMC Snapper Grouper Advisory Panel as a representative for the charter/head boat sector of Florida.

What is working with Magnuson?

When it was reauthorized in 2006 most fishermen had no idea as to how it would affect them. The guide lines provided by Magnuson mandated the use of science based management and establish rigid time frames to end overfishing. This was seen by most as a very positive thing. Since then, overfishing has ended. Many stocks of fish are more plentiful today than at any time in my career. The various management councils are to be commended for this huge accomplishment. That is the positive result of the reauthorization.

What hasn't worked?

Unfortunately this accomplishment has come at a cost to fisherman and coastal communities. The charter fishing fleets in my area has experienced a 50 percent decline in recent years. Many Captains attribute this to the complete closure of one of the most sought after species in our region Red Snapper. This closure was a direct result of the reauthorization. This was extremely difficult for the public to understand. From their perspective the Red Snapper population had been increasing in size and number and fishing was better than it had been for years. Many felt the decline in fishing effort was a direct result of closing of this one highly sought after species. NOAA Marine Recreational Information Program or MRIP shows a decline in total recreational trips. https://www.st.nmfs.noaa.gov/economics/publications/feus/fisheries_economics_2011

Curiously, MRIP shows an increase in sales, jobs, and income. I'm not sure how less trips and effort translates into more jobs and value; it's not what is happening in my area. MRIP is also tasked with estimating recreational landings used for management decisions that open and close fisheries. In many cases not only have we ended over fishing, for some species fishing has been almost entirely eliminated. The Red Snapper season was one-three day weekend in 2013 for recreational fisherman in the South Atlantic.

National Standards for Fishery Conservation and Management states:

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

- There needs to be more emphasis and attention given to achieving, on a continuing basis, the optimum yield.
- We need to be sure that we are allowing the fisherman to harvest what the science allows.

(2) Conservation and management measures shall be based upon the best scientific information available.

- Fishermen refer to this as *best available science*. We have been told in many cases that the data might not be complete, up to date, may be very little available, *but it's the best we have and that is what the managers are required to use.*
- How can we mandate the use of inadequate data to make decisions that have such profound impacts on people's lives?
- Given the immense value of our recreational fisheries (Southwick Associates gives a number of 70.3 billion in economic output nationwide in 2011) Comparing NOAA's Recreational and Commercial Fishing, Economic Data Report—Southwick Associates
- *MyFWC.com* states saltwater fishing in FL generates \$7.1 billion and supports 69,751 jobs.
- Numbers from the NMFS economic report <https://www.st.nmfs.noaa.gov/Assets/economics/documents/feus/2011/FEUS2011%20-%20South%20Atlantic.pdf> have the charter boat sector in the south Atlantic valued at \$124 million just for 2009 and supporting around 2,000 jobs.
- The same report shows a decline of almost 2 million trips from 2010 to 2011 in the South Atlantic alone.
- The decline in offshore trips isn't directly measured but around 50 percent of all trips were by shore based anglers.

How can we afford not to fund the research needed by the councils to do the job properly? I often use the analogy that you need open heart surgery but your doctor doesn't have funding for instruments and supplies so you need to take a drink of whiskey and he's going to use a pocket knife, it's pretty sharp—*the best available. There must be a minimum standard required for data used in stock assessments.*

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

- The councils for the most part have done pretty well with this one. The challenge in the South Atlantic is some stocks, like Red Snapper, are more important to some states than others in the EEZ.

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

- I'm not sure how you assign a privilege to anyone without infringing on the rights of another. For one to receive, someone else has to give. Fish are a resource that should be *managed for the benefit of all citizens, not just a privileged few.*

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

- Individual areas have big differences.
 - Example: Winter weather in the Carolinas compared to Florida. Closures on different stocks like Black Sea Bass that have been occurring during the winter months have a much greater effect on Florida than the states to the north.

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

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

(8) Conservation and management measures shall, consistent with the conservation requirements of this act (including the prevention of overfishing and rebuilding of over fished stocks) take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirements of paragraph (2) in order to (a) provide for the sustained participation of such communities, and (b) to the extent practicable, minimize adverse effects on such communities.

- We are back to the best scientific information available. The science and in many cases, lack of, is what's driving management.
- From a fisherman's perspective there has been little, if any, consideration given to providing for sustained participation and the minimization of adverse effects on fisherman and their communities.
- Fisherman have been subjected to lower bag limits, increased size limits and shortened seasons. Most fishermen would be surprised to know this language is even in the document. Most feel Magnuson is being used as a weapon against them not as a management plan for their benefit. The loud and clear message they have heard is we have to err on the side of caution, be extremely conservative in setting limits and seasons, and learn to deal with it.
- Management must be allowed the flexibility to take into consideration the adverse effects of some of the rebuilding plans.
- Time frames used in rebuilding should be stock specific, the councils should have the flexibility to consider the adverse effects on the fisherman.
- The decline of these stocks didn't happen in a short time period. The councils need to have a reasonable amount of time to end overfishing

(9) Conservation and management measures shall, to the extent practicable (a) minimize by catch and (b) to the extent by catch cannot be avoided, minimize the mortality of such by catch.

- More studies need to be conducted on by catch and discard mortality.
 - Post quota by catch mortality estimates are deducted up front from the ACLs. Some of these estimates are based on incomplete, poorly vetted studies.
 - Effort is figured from MRIP estimates.
 - We are estimating how many fish might be killed accidentally; we are estimating how many anglers actually went fishing and what for.
 - The only thing that is not estimated is the very real numbers of fish that are deducted from ACL's.
 - Fishermen deserve better—we have to fund accurate up to date science.

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

- In the South Atlantic this is not an area of huge concern. Every captain should know his vessels limitations.
- Extremely short seasons, like the 2013 Red Snapper season in the south Atlantic could encourage someone to make a bad decision.

The South Atlantic is an extremely diverse region:

- The SAFMC is charged with managing 72 species; *this diversity requires flexibility.*
- It is impossible to manage such diversity effectively using a one size fits all approach.
- Some species are short lived while others have life spans greater than 50 years.
- Some species are highly fecundate, others are not.
- Some spend their juvenile period in the estuaries others in the open sea.

Fishermen are not asking for unrealistic changes. Fisherman need:

- The council to have some flexibility in how they set up rebuilding plans.
 - Stringent time frames for rebuilding fish stocks are destroying the livelihoods of the very people this management plan was supposed to benefit.
 - The best scientific information available should not be a product of insufficient funding.

Charter fishermen are hanging on by a thread; we need your help. Participation in offshore fishing is on a rapid decline. *Participation is crucial; without the involvement of the fishing community, who will make sure the resource is sustainable for future generations?*

There are some very smart dedicated people involved in fisheries management. Please give them the flexibility and financial tools to do their jobs.

Involvement includes Fisheries Management skill in the following:

- SEDAR assessments on numerous SA species of reef fish to include:
 - Red Snapper
 - Gray Triggerfish
 - Cobia
 - Spanish Mackerel
- Fisheries Independent Data Monitoring Workshop
- ORCS workshop
- National EM workshop
- Fisheries Independent Research with state of FL

Acronyms:

SEDAR—South east data assessment review
 EEZ—Exclusive economic zone
 ORCS—Only reliable catch statistics
 MRIP—Marine recreational information program
 EM—Electronic monitoring
 SAFMC—South Atlantic fishery management council
 SA—South Atlantic
 ACL—Annual catch limits

Senator BEGICH. Thank you very much for your testimony.

Next we have Bill Tucker, commercial fisherman, Gulf of Mexico Reef Fish Shareholders Alliance. Thank you very much for being here.

STATEMENT OF WILLIAM E. "BILL" TUCKER, COMMERCIAL FISHERMAN, GULF OF MEXICO REEF FISH SHAREHOLDERS ALLIANCE

Mr. TUCKER. Thank you for the invitation to appear. Mr. Chairman, members of the Committee: My name is Bill Tucker. I've been a commercial grouper and red snapper fisherman in the Gulf since 1985.

Groupers and red snappers are served in restaurants and at family dinner tables across our Nation. The vast majority of Americans do not catch their own fish for dinner. They rely on people like me to bring it to the marketplace.

Fishery resources are renewable, but they are also fragile and are easy to overexploit. They are very difficult to rebuild. Until we rebuild them, we will never enjoy the full economic and social benefits that are possible. And even with rebuilt stocks, ineffective management can choke off the benefits we have every reason to expect.

In the commercial sector, current management is working. Our IFQ systems in the grouper and red snapper fisheries, designed with extensive fisherman input, have extended fishing seasons to a year-round basis and eliminated quota overages. In an era where reduced quotas almost always translate into shorter seasons, IFQ management has changed that. By aligning business incentives with stock rebuilding, IFQ's work where traditional management

continues to fail. Because of IFQ's, data reporting requirements have been expanded and cost-sharing regimens have been implemented.

It's not all rosy in the Gulf and, even though Magnuson provides a great road map for success, it doesn't guarantee it. For example, even though we've ended overfishing for red snapper, the stock is still classified as overfished. And even though we've increased the annual catch limits from 5 to 11 million pounds, charter boat operators and their clients and private recreational fishermen are held hostage by outdated management styles.

When we try to control recreational effort by shortening their season, we only incentivize the race to catch fish. On an individual level the mind set goes that: Hey, if the seasons are short, I better catch all I can before the season closes. That way I won't miss out.

But when you broaden this perspective from an individual basis to an entire sector, you begin to understand how the quota is reached much faster and the seasons become shorter, or the quotas are exceeded, or both, as in the Gulf's recreational red snapper fishery. This explains why the simultaneous increase in recreational quotas and the decrease in the length of the season is not a paradox at all. It's quite predictable.

The good news is that leaders in the for-hire component of the recreational sector are making strides and persuading the council to try alternative management techniques. If given the chance, they'll succeed, and then they too can maximize the benefits of rebuilding stock for their sector.

Another idea hotly contested in the Gulf today is to reallocate more red snapper to the recreational fishermen—to the recreational sector from the commercial sector. Today the allocation formula is roughly 50–50 and it should stay that way. Taking fish away from an accountable commercial sector would limit the public's access to this resource. The U.S. population is slightly more than 300 million people. Of this, roughly 1 percent are Gulf region recreational anglers. This 1 percent is allocated roughly half of the red snapper resource. Were we to alter this balance between recreational and consumer access, restaurants and consumers would see a shortage in supply and an increase in price. Our fishing businesses, as well as the businesses downstream, would be damaged in the short term by disruptions in supply and in the long term by permanent shifts in market share that favor imported red snapper and foreign businesses. Reallocation may be an economic boon for the 1 percent, but it sure isn't fair and equitable for everybody else.

Let's look at reallocation from another angle. If a sector has a long history of overharvesting its baseline quota, why would we increase the baseline, compounding the error? What message do we send when access is reallocated away from an accountable sector in favor of one that is not?

Reallocation is not the answer to short seasons in the Gulf's recreational fishery. The answer is a fundamental shift in management strategy. Reallocation should not be the red herring that takes our focus away from mismanagement. We need the resolve to focus on the real problem, which is management.

The reauthorization needs to include language that prevents re-allocation away from sectors that manage within their quotas and gives it to those that do not. Magnuson should address this issue before an improper precedent is set.

We have the best science in the world. Our data collection system could use some more, and fishermen would have a lot more confidence in the system if they were all contributing catch and effort data to the State and Federal agencies. In my opinion, every fisherman should be expected to contribute catch and effort data as a condition of participation in the fishery, very similar to the way we collect data on migratory game birds. Fisherman input is essential. Magnuson should demand no less.

Thank you.

[The prepared statement of Mr. Tucker follows:]

PREPARED STATEMENT OF WILLIAM E. "BILL" TUCKER, COMMERCIAL FISHERMAN,
GULF OF MEXICO REEF FISH SHAREHOLDERS ALLIANCE

Chairman Begich, Ranking Member Rubio and Members of the Committee,

Thank you for the opportunity to testify on the important fisheries issues currently under discussion in your committee. As a commercial fisherman from Dunedin, Florida with 30 years of experience in the industry, I proudly provide access to domestic, sustainable Gulf seafood to meet the growing demand of millions of Americans who have chosen to enjoy our native wild fishery resources on a plate, at home, or in restaurants throughout the country. This is how the vast majority of Americans get their fish. I support their access. In fact, I depend on it.

I have served the Gulf of Mexico Fishery Management Council (Gulf Council) as a member of several of its Advisory Panels related to the reef fish fishery. I am thankful for the regional Council process that allows stakeholders to have direct involvement in management of our fishery resources. There is a lot to be said in favor of the Councils open process where verbatim minutes and rigid notification requirements are among the disciplines that ensure fairness and equity among all user groups. As a participant I've seen good, bad and ugly, and I credit the Council process for doing a pretty good job of shining the proper light on each.

On balance, the Magnuson-Stevens Act (MSA) is working. The congressionally-authorized management system of science-based limits, accountability measures, and new management methods such as individual fishing quotas (IFQs), are rebuilding fisheries and ending overfishing in the Gulf of Mexico and around the country. I strongly believe that sustainable fishing businesses and strong fishing communities can only exist where fishery resources are responsibly managed using science, and accounting for fishing in excess of limits is enforced. I am happy to report that we are making strides towards meeting these goals. And while there are forces to the contrary, it is my opinion that placing the health of our fishery resources as priority one is the best way to set the stage for maximizing economic and social benefits for our Nation.

Current Management

The Gulf Council oversees all of the commercial fishing for federally managed species in the Gulf of Mexico from the end of state waters out to 200 nautical miles. While not perfect, the congressionally-authorized Council system manages many of the Gulf's commercially important species in real time, and coordinates the management, data collection and enforcement of fishing activity across several jurisdictions. The benefit of the Council structure is that representatives from all of the Gulf States and stakeholders are able to make decisions that reflect local needs. Many people are not aware that sixteen of the 17 voting members of the Gulf Council are either nominated or appointed by Gulf state governors. This is an important structure to have because no two fisheries are the same and management decisions should be based on local needs. The Council process does a great job of integrating the ideas of a diverse mix of opinions into alternatives that address issues specific to the Gulf Coast.

In the commercial sector, current management is working. The overwhelming success in rebuilding the red snapper fishery in the Gulf of Mexico shows the benefits that can be achieved through the right management system and fishermen participation in the process. Several years ago, commercial red snapper and grouper fisher-

men voted to move to an individual fishing quota system (IFQ) that has reduced discards, kept catch within limits and allowed fishermen the flexibility to operate when weather or market conditions are best. In an era where reduced quotas almost always translate into shorter seasons, IFQ management has provided the dynamic to change that. By aligning business incentives with stock rebuilding, IFQ's work where traditional command and control management continue to fail. Since the program was adopted for commercially-caught red snapper in 2007, we have seen the total allowable catch increase from 5 million to 11 million pounds—that's an increase of 120 percent that benefits consumers and recreational fishermen alike.

Unfortunately, for-hire operators, their clients, and private recreational fishermen have not experienced the benefits of these extra fish because they continue to be managed in the traditional command and control manner of restrictive seasons and bag limits. This is not the fault of individual anglers, but of the management system under which they are operating. There is an obvious need to consider and implement new management tools that improve recreational access and flexibility, yet it seems to be an uncomfortable concept that the recreational demand for fish exceeds the recreational quota. Overcoming this perception is the first step in reconciling their demand for fish with the available supply. Solutions are readily available but first will require the acknowledgement that allocation of the recreational quota among recreational fishermen is a challenging but necessary prerequisite. Our fishery resources are renewable, but not unlimited. Restraint is necessary.

Regional Management

The frustrations felt by many recreational fishermen are understandable, and solutions do exist, but some of the ideas being put forth to address them would cause more harm than good. Regional management—or transferring more authority to the states or other entities—has been proposed in many different forms in Congress through legislation as well as at the Gulf Council through Amendment 39. I believe that giving states more authority to manage the recreational fishery *with Council oversight* may have merit, and the concept should be further explored.

However, the commercial management system will not be easily replaced by state or regional management, and efforts to transfer authority of the commercial industry from the Gulf Council to other entities would hurt our industry. States have more experience and capacity to manage recreational fishing than they do commercial fishing. For our industry, they lack the monitoring and enforcement resources and capacity to do so.

I do not support legislation in Congress to transfer authority from the Gulf Council to the Gulf States Marine Fishery Commission (Commission). This is duplicative and would serve only to create more layers of government. As I mentioned previously, 16 of the 17 Council members are nominated or appointed by Gulf state governors. Many of these same members sit on the Commission. The difference is that the Commission is not as well equipped to manage offshore fisheries as the Council, and in any case it makes no sense to use a separate layer of bureaucracy to manage one of many species that are caught together primarily in Federal waters.

Reallocation

Another idea being debated in the Gulf today is to allocate more red snapper to recreational fishermen. Today, the allocation formula is roughly 50–50 and it should stay that way. Taking fish away from an accountable commercial sector would limit public access to this resource. Of the U.S. population of more than 300 million people, roughly 3.2 million people, or about 1 percent fish recreationally in the Gulf of Mexico and its saltwater tributaries. Currently they are allocated roughly 50 percent of the red snapper resource. Were we to alter this balance of 50–50 between recreational and consumer access, restaurants and consumers would see a shortage in supply and an attendant increase in price. Our fishing businesses would be damaged in the short term by disruptions in supply, and in the long term by permanent shifts in market share that favor imported red snapper and the foreign businesses that ply the trade. On the other hand, continuing a reliable and vibrant supply of safe, sustainable domestic seafood is an obvious barometer of a sustainably managed resource. Besides, the Gulf's recreational fishermen already take home 80 percent of the most popular fish in the Gulf, including overwhelming majorities of amberjack, red drum, speckled trout, king mackerel and triggerfish. Even if the recreational sector received the *entire* red snapper commercial quota, anglers would get only another month or two of fishing each year, and that season would continue to shorten over time because the underlying management system is inadequate to prevent overharvest. Indeed, the recreational fishery already accounts for 56 percent to 65 percent of total red snapper landings even though their allocation is supposed

to be 49 percent of the total catch. For the sake of common sense, language should be included in the reauthorization that precludes reallocation to any sector that overharvests its annual quota, because reallocating from an accountable sector to one that overharvests sends the wrong message about taking stewardship seriously. Recreational fishermen who are understandably frustrated with short seasons are looking for solutions, and those solutions exist, but reallocation will not provide them with any long term benefits. It will only prolong the implementation of sound management, while short-changing millions of Americans by redistributing their seafood access to others.

Data Collection

I have witnessed the frustrations of many who complain that somehow fishery science is flawed, especially in cases where the scientific conclusions do not coincide with popular conceptions. My experience is that the NMFS, NOAA Fisheries and the State Agencies have the best, most objective scientists in the world. These people are smart, and have an ability to exclude the various political pressures from their scientific analysis. I have to give them credit.

And while I credit the scientists for their exceptional abilities, data collection seems to be a weak link in the scientific process. Budget constraints are one of the drivers of data paucity. This reality is dealt with on a regular basis at the regional fishery offices and science centers. Cooperative research is one effective and promising avenue to collect data. But my experience tells me that for some data, a fundamental change in philosophy is needed. In my opinion, every extractive user of our Nation's fishery resources should be expected, as a condition of participation, to submit catch and effort data. This is exactly how we have designed the commercial fisheries in the Gulf, where data submission is a condition of permit renewal. It's an amazingly simple and effective discipline. The cumulative effect of this individual accountability in the commercial sector is the fundamental basis for accountability at the sector level. I see no good reason why the expectation of data submission for the recreational sector should be discounted on an individual basis. This requirement could mirror the way many States manage recreational migratory bird hunting, where next years 'stamp' is not issued until the hunters previous year effort and harvest data is submitted. The benefits of this approach would be substantial. Not only would the quantity of data improve, but so would its quality and resolution. And one of the understated benefits would be the buy-in of the fishermen, since they would know that their data is used for better "science".

These types of improvements can be made and Congress can help. To that end, I support legislation recently introduced by Congressman Rob Wittman (VA)—H.R. 3063—called the Healthy Fisheries Through Better Science Act. The bill would make several improvements to the current system.

First and foremost, the bill recognizes that fishermen should be more involved in the data collection process. This is important for two reasons. First, fishermen know the waters they fish, and can make valuable contributions to the underlying information managers use to make decisions. Second, fishermen do not always trust the data and models NMFS uses and as a result are more likely to oppose management based on them. H.R. 3063 would require NMFS to establish standards for the submission of data and analyses by outside sources, including fishermen and academics.

Congressman Wittman's bill also addresses the need for more timely stock assessments by requiring the Secretary of Commerce to set a public schedule for conducting stock assessments, including species that have never been assessed. The legislation also requires NMFS to ensure that it is using the most cost-effective methods for monitoring and to inform fishermen in advance if they will be required to share these costs.

Conclusion

In closing, the fishery management tools and requirements in the MSA have succeeded in bringing U.S. fisheries up to a standard of sustainability of which fishermen can be proud. And after years of work by fishermen and regional managers, the commercial sector's management plan is finally working. There are many things left to do in fisheries management, including modernizing fishery data collection and analysis, incentivizing stewardship and conservation, developing and testing new management methods, and ensuring fair access to seafood for the American consumer. I look forward to working with members of this committee to meet these goals. Thank you for the opportunity to testify, and I look forward to answering any questions you may have.

Senator BEGICH. Thank you very much for your testimony.

The next person on the list, we have Mr. Crockett, Director of U.S. Fisheries Campaigns, Pew Charitable Trusts. Thank you.

**STATEMENT OF LEE CROCKETT, DIRECTOR, U.S. OCEANS,
THE PEW CHARITABLE TRUSTS**

Mr. CROCKETT. Thank you, Mr. Chairman. On behalf of The Pew Charitable Trusts, I appreciate the opportunity to provide testimony on the progress made in implementing the Magnuson-Stevens Act in the Southeast U.S. and what refinements will be needed to improve conservation and management to meet the challenges of the 21st century.

Pew has been involved with Magnuson-Stevens for 20 years. For over 5 years we've been advancing policies that will ensure abundant fish and healthy oceans in the South Atlantic, Gulf of Mexico, and the U.S. Caribbean regions. Our involvement with the Magnuson Act began when we looked at scientific assessments of the status of a number of iconic fish and found a system that allowed overfishing, delayed action to rebuild depleted populations, and allowed economics to trump conservation.

To use a word that we've heard commonly today, there was a lot of "flexibility." Unfortunately, while the Act provided flexibility to use different management tools, it also allowed flexibility to avoid difficult but necessary decisions to put species on the road to recovery.

Congress also saw that flexibility was allowing managers to avoid addressing these problems and twice amended the Act to establish clear mandates to restore the valuable fish populations that support fishermen and fishing communities. South Atlantic black sea bass is a good example of fishery management prior to the 2006 amendments and the progress we have made since making those changes. For decades, fishermen caught black sea bass faster than they can reproduce, driving this fish population to dangerously low levels. Managers put a rebuilding plan in place to restore this depleted fish population, but lax implementation failed to prevent its continued decline.

Finally, in January 2011 management measures for black sea bass and eight other species subject to chronic overfishing were implemented, including stronger consequences when fishing limits are exceeded. A scientific study completed in April of this year found that overfishing of black sea bass had ended and the population's recovery had been achieved. As a result, managers doubled the catch limit for this season from 847,000 to 1.8 million pounds. This should have a positive impact on ports from North Carolina to Florida.

This story is part of the larger emerging picture of success that is happening in fisheries across the country. According to the most recent data from NOAA fisheries, catch limits have ended overfishing in 22 of the 38 U.S. fish stocks subject to overfishing in 2007. In addition, 34 stocks have been declared rebuilt since 2000.

Economists at NOAA Fisheries estimated in 2011 that rebuilding all depleted fish stocks that year would have generated \$31 billion in sales, supported an additional 500,000 jobs, and increased the revenue that fishermen receive at the dock by \$2.2 billion.

Despite the demonstrated success of the Magnuson Act in rebuilding depleted stocks, some stakeholders are calling for greater flexibility. Such calls ignore the fact that the Magnuson-Stevens Act has a great deal of flexibility in how long those plans should be and how they should be implemented. Over half the plans are longer than ten years due to species biology and environmental conditions.

We've made a great deal of progress in improving the status of individual fish populations since passage of the 2006 amendments to the Magnuson-Stevens Act. In order to ensure continued success, we must maintain our commitment to science-based management that prevents overfishing and rebuilds depleted populations while broadening the focus of management to minimize the impacts on larger marine ecosystems. This step will place a greater focus on restoring and maintaining the health and resiliency of ocean ecosystems. It will require strengthening existing requirements to protect the habitats that fish depend on for reproduction and growth, reduce the non-target catch or bycatch. It also requires managing forage fish so that they're abundant enough to support the larger fish, marine mammals, and birds that depend on them for food. Finally, it requires developing a better understanding of how species interrelate with each other and the surrounding ecosystem and making fishery management decisions that will promote the restoration and maintenance of healthy and resilient ocean ecosystems.

Thank you again for the opportunity to share the views of The Pew Charitable Trusts. My written testimony goes into more detail on our recommended changes to the Magnuson Act and I look forward to discussing them with you as well as answering any questions you may have. Thank you.

[The prepared statement of Mr. Crockett follows:]

PREPARED STATEMENT OF LEE CROCKETT, DIRECTOR, U.S. OCEANS,
THE PEW CHARITABLE TRUSTS

On behalf of The Pew Charitable Trusts (Pew), I appreciate the opportunity to provide testimony on the progress made in implementation of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) in the Southeastern United States and what refinements will be needed to improve conservation and management to meet the challenges of the 21st century.

Pew has been involved with the Magnuson-Stevens Act for 20 years. Pew grants supported fishing and environmental groups involved in the reauthorization of the Act in 1996 and again in 2006. In 2007 we began operation as a not-for-profit advocacy group that supports effective implementation of the Magnuson-Stevens Act at the national and regional level. For over five years we've worked with managers and stakeholders to advance policies that will ensure abundant fish and healthy oceans for generations to come in the South Atlantic, Gulf of Mexico and U.S. Caribbean regions.

As Pew's director of U.S. Oceans, I oversee our fisheries advocacy in the United States. These include efforts in the Northeast, South Atlantic, Gulf of Mexico, U.S. Caribbean, and the Pacific. Before joining Pew, I was executive director of the Marine Fish Conservation Network, the largest national coalition dedicated exclusively to promoting the sustainable management of ocean fish. The Network was actively involved in the 1996 and 2006 reauthorizations of the Magnuson-Stevens Act. Previously, I was a fishery biologist with the National Marine Fisheries Service, leading agency efforts to protect essential fish habitat. Finally, I was a staff member of the U.S. House Committee on Merchant Marine and Fisheries, working on a variety of fisheries, environmental and boating safety issues.

Our involvement in the Magnuson-Stevens Act began when we looked at scientific assessments of the status of a number of iconic fish such as New England's cod and

the Southeast's red snapper and found populations that were a tiny fraction of their historic size. In our search for causes we found a system that allowed overfishing, delayed action to rebuild depleted populations, and allowed economics to trump conservation. To use a word that we commonly hear when Magnuson reauthorization is discussed today, there was a lot of "flexibility" in our Federal management system. Unfortunately, while the Act provided flexibility to use different management tools, it also allowed flexibility to avoid the difficult but necessary decisions to put these species on the road to recovery.

Congress also saw that flexibility was allowing managers to avoid addressing these problems and twice amended the Act to establish clearer mandates to restore the valuable fish populations that are the cornerstone of the fishing industry and the coastal communities it supports.

In the 1996, a bipartisan group of lawmakers passed the Sustainable Fisheries Act, which amended the Magnuson-Stevens Act to:

- Prohibit fishery managers from using an economic rationale to set catch levels above what is sustainable;
- Require timely rebuilding of overfished populations (populations of fish that are at unsustainably low levels) to healthy levels;
- Require managers to implement practicable measures to minimize the catching and killing of non-targeted ocean wildlife, known as bycatch; and
- Require the identification of essential fish habitat and practicable measures to protect it from damaging fishing.

Despite these changes, overfishing continued to prevent the recovery of many fish populations. Again, a bipartisan group of lawmakers, led by the late Senator Ted Stevens (R-Alaska) passed legislation strengthening the Magnuson-Stevens Act in 2006. That legislation was signed into law by President George W. Bush in 2007. The most recent amendments require fishery managers to follow the recommendations of their science advisors to set annual catch limits that end and prevent overfishing and include accountability measures to ensure those limits are not exceeded. The catch limits were to be established by 2010 for fish populations experiencing overfishing, and by 2011 for all other populations. The 2006 amendments also prohibited overfishing in rebuilding plans designed to restore depleted fish populations.

The Magnuson-Stevens Act is Working

Southeast Successes

Because of effective implementation of the 2006 amendments by the National Oceanic and Atmospheric Administration's Fisheries Service (NOAA Fisheries) and the regional fishery management councils, overfishing is ending and depleted fish populations are being restored. According to NOAA Fisheries' most recent Status of Stocks update, 34 fish stocks have been restored since 2000 and the number of stocks subject to overfishing is 26, down from 72 in 2000.

The 34th restored stock is the South Atlantic black sea bass. This success story is a testament to the Magnuson-Stevens Act's requirements to establish science-based catch limits that do not allow overfishing and accountability measures to ensure compliance with those limits.

For 30 years, fishermen caught black sea bass faster than they can reproduce and continued overfishing drove the fish to dangerously low levels. Managers put a rebuilding plan in place to comply with the 1996 requirements to restore this depleted fish population, but lax implementation of the rules failed to prevent its continued decline. In January 2011, management measures for black sea bass and eight other species subject to chronic overfishing were implemented and included stronger consequences when fishing limits are exceeded.¹

This was not easy. It took the visionary leadership of several members of the South Atlantic Fishery Management Council. But the push for annual catch limits and enforcement of those limits has enabled the council to begin reversing the damage done by overfishing. After more than two decades, scientists are now finding increases in the average size, age distribution, and number of sexually mature females among black sea bass. This growth in the capacity of the species to reproduce effectively promises more fish for the future.²

¹ NOAA Fisheries, Southeast Fishery Bulletin, "NOAA Will Publish a Final Rule to Establish Annual Catch Limits and Accountability Measures for Nine South Atlantic Snapper-Grouper Species," Dec. 30, 2010. <http://safmc.net/Library/pdf/FBAmendment17BFinalRule122910.pdf>

² Personal communication between John Carmichael, South Atlantic Fishery Management Council, and Holly Binns, The Pew Charitable Trusts. Apr 16, 2013.

Even better news is a scientific study completed in April, which found overfishing of black sea bass had ended after more than 20 years and the target for the population's recovery had been achieved. As a result, managers doubled the catch limit for this season from 847,000 to 1.8 million pounds.³ This should have a positive impact for ports from North Carolina to Florida as fishing quotas and seasons increase. In fact, a study Pew commissioned last year concluded that overfishing of black sea bass cost the region \$138 million per year in combined direct and indirect recreational fishing expenditures from 2005 to 2009.⁴

Red snapper is another southeastern species greatly damaged by decades of overfishing. By 1988, overfishing of red snapper in the Gulf of Mexico had reduced the spawning population to less than 15 percent of the minimum target level for this population.⁵ Disputes over how to rebuild it, however, went on for over 15 years. By 2006, the population of reproductively mature red snapper was estimated to be only 17 percent of the targeted level.⁶ The next year, a Federal court ruled that NOAA managers were not taking appropriate action to rebuild red snapper, and ordered changes. In 2008, a science-based rebuilding plan was implemented finally starting this species on the road to recovery after more than twenty years of sanctioned overfishing.

However, rebuilding a species that has been depleted over many decades and can live over 50 years is neither quick nor easy. Full recovery of the red snapper population in the Gulf of Mexico is not anticipated until 2032. This is due to the species' long life span and the need for many more older females in the population, which are far better breeders than younger fish. In fact, one 24-inch red snapper has been estimated to produce as many as eggs as 212 seventeen inch red snappers.⁷ Thus, these older, larger fish have a disproportionate impact on the population's reproductive potential and are critical to red snapper's recovery.

Today we are starting to see the fruits of catch limits and other efforts to enforce and fine-tune rebuilding plans. For example, after years of annually exceeding its annual quota for red snapper, the commercial sector has abided by catch levels for the last eight years. A 2009 assessment found Gulf red snapper overfishing had finally ended after more than two decades of overexploitation.⁸ This year the allowable catch jumped to 11 million pounds, up 120 percent from 2008, when the most recent rebuilding plan was implemented. This is the highest allowable catch ever for Gulf red snapper and the fourth year in a row such an increase occurred.

Significant challenges remain in determining how to ensure the recreational sector does not continue to exceed their allocation of the catch limit, as has happened nearly every year since 2007, while providing adequate opportunity for offshore anglers to target this popular species. As managers work to address this issue, it is critical that adhering to the rebuilding plan remain the top priority of Congress and the Gulf of Mexico Fishery Management Council. Our analysis of the cost of overfishing in the Gulf red snapper fishery found that recreational fishing expenditures could have generated an additional \$33.2 million annually between 2005 and 2009 for the region, and commercial fishermen lost \$12.3 million in 2009 alone.⁹

In addition to these successes, the most recent update of the NOAA Fisheries Status of Stocks lists South Atlantic red grouper, and Gulf of Mexico gag grouper, gray

³South Atlantic Fishery Management Council, "Council Approves Increases for Black Sea Bass Annual Catch Limits," May 14, 2013. <http://safmc.net/sites/default/files/News%20Releases/pdf/051413-BlackSeaBass-NR.pdf>

⁴Taylor Hesselgrave and Kristen Sheeran, "Economic Costs of Historic Overfishing on Recreational Fisheries: South Atlantic and Gulf of Mexico Regions, Report to the Pew Charitable Trusts," Ecotrust, Jul. 26, 2012. http://www.pewenvironment.org/uploadedFiles/PEG/Publications/Report/Ecotrust_SE_Rec_Fishing.pdf

⁵Goodyear, C.P. 1988. "Recent trends in red snapper fishery of the Gulf of Mexico," NMFS. SEFSC. Miami FL. CRD 87/88-16. Memo. Rpt. 98p, see pages 12 and 24.

⁶SEDAR. 2013. SEDAR 31—Gulf of Mexico Red Snapper Stock Assessment Report. SEDAR, North Charleston SC. 1103 pp. Available online at: <http://www.sefsc.noaa.gov/sedar/SedarWorkshops.jsp?WorkshopNum=31>

⁷Florida Fish and Wildlife Conservation Commission, "Red Snapper," May 2, 2012. http://myfwc.com/media/2102699/4BGulfRedSnapper_presentation.pdf

⁸NOAA, "NOAA Increases Gulf of Mexico Red Snapper Catch Limit: Population Rebounds as Overfishing Ends," May 29, 2012. <http://www.noaaneews.noaa.gov/stories2012/20120529-redsnapper.html>

⁹Hesselgrave and Sheeran, "Economic Costs of Historic Overfishing on Recreational Fisheries: South Atlantic and Gulf of Mexico Regions, Report to the Pew Charitable Trusts," Ecotrust, Jul. 26, 2012. http://www.pewenvironment.org/uploadedFiles/PEG/Publications/Report/Ecotrust_SE_Rec_Fishing.pdf; Taylor Hesselgrave, Sarah Kruse, and Kristen A. Sheeran, "The Hidden Cost of Overfishing to Commercial Fishermen: A 2009 Snapshot of Lost Revenues, Report to The Pew Charitable Trusts," Ecotrust, July 25, 2011. http://www.pewenvironment.org/uploadedFiles/PEG/Publications/Report/FINAL_Cost_of_Overfishing_Commercial_Study_Full_Analysis_FINAL_7_20_11.pdf

trigger fish and greater amberjack as no longer subject to overfishing.¹⁰ While these fish are still designated as overfished and in rebuilding plans, this is an important step in their restoration.

National successes

These stories are part of a larger emerging picture of success that is happening in fisheries across the country. Annual catch limits designed to end and prevent overfishing were established through amendments to all 46 Federal fishery management plans by June 2012, meaning 371 stocks and stock complexes are now managed under plans with science-based limits.¹¹ These limits have ended overfishing for 22 of the 38 (58 percent) U.S. stocks subject to overfishing in 2007.¹² In addition, 34 overfished or depleted stocks have been declared rebuilt since 2000.¹³

The recently released National Research Council (NRC) report on its evaluation of rebuilding under the Magnuson-Stevens Act echoed this success noting that the current rebuilding approach has “resulted in demonstrated successes in identifying and rebuilding overfished stocks” and that “fishing mortality has generally been reduced, and stock biomass has generally increased, for stocks that were placed in a rebuilding plan.”¹⁴ They go on to say that “the legal and prescriptive nature of rebuilding mandates forces difficult decisions to be made, ensures a relatively high level of accountability, and can help prevent protracted debate over whether and how stocks should be rebuilt.”¹⁵ They also note that “setting rebuilding times is useful for specifying target fishing mortality rates for rebuilding and for avoiding delays in initiating rebuilding plans.”¹⁶

Despite the demonstrated success of the Magnuson-Stevens Act in rebuilding depleted fish populations, some stakeholders are calling for greater flexibility in establishing rebuilding plans. Such calls ignore the fact the Magnuson-Stevens Act has a great deal of flexibility in how long those plans should be. The Act currently allows rebuilding plans to exceed the law’s 10-year target (which is twice the time scientists calculate that a majority of fish populations require for rebuilding)¹⁷ to accommodate the biology of the fish species, other environmental conditions, or management measures under an international agreement. Further flexibility exists to amend rebuilding plans when new information on the status of the stock becomes available. This flexibility is apparent when examining current rebuilding time lines, which range from four years to more than 100 years. Over half of the plans (23 of 43) are longer than 10 years due to species biology and environmental conditions.¹⁸

Restoring a depleted fish population causes short-term economic hardships for affected fishermen. Managers must acknowledge and mitigate those adverse effects, but not at the expense of needed conservation measures, particularly when considering increased economic returns and employment opportunities that will result from rebuilt populations. For example, half of the rebuilt stocks with available data now produce at least 50 percent more revenue than when they were classified as overfished, and seven stocks produce revenue that is more than 100 percent higher

¹⁰NOAA Fisheries, “Third Quarter Update for the 2013 Status of U.S. Fisheries,” <http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>

¹¹NOAA Fisheries Service, “Turning the Corner on Ending Overfishing: U.S. Fisheries Reaches Historic Milestone in 2012,” <http://www.nmfs.noaa.gov/stories/2012/01/docs/Annual%20Catch%20Limits%20Fact%20Sheet%20Final.pdf>; NOAA Fisheries, “Status of Stocks 2012, Annual Report to Congress on the Status of U.S. Fisheries,” 2012. http://www.nmfs.noaa.gov/sfa/statusoffisheries/2012/2012_SOS_RTC.pdf

¹²Samuel D. Rauch III, “Written Testimony for the Hearing on Magnuson-Stevens Fishery Conservation and Management Act before the Committee on Natural Resources,” U.S. House of Representatives, Sept 11, 2013. <http://www.legislative.noaa.gov/Testimony/Rauch091113.pdf>

¹³NOAA Fisheries, “Third Quarter Update for the 2013 Status of U.S. Fisheries,” <http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>

¹⁴National Research Council, “Evaluating the Effectiveness of Fish Stock Rebuilding Plans in the United States,” Washington, D.C.: The National Academies Press, 2013. http://www.nap.edu/catalog.php?record_id=18488

¹⁵National Research Council, “Evaluating the Effectiveness of Fish Stock Rebuilding Plans in the United States,” 2013.

¹⁶National Research Council, “Evaluating the Effectiveness of Fish Stock Rebuilding Plans in the United States,” 2013.

¹⁷Carl Safina *et al.*, “U.S. Ocean Fish Recovery: Staying the Course.” *Science*, Vol 309: 707–708, Jul 29, 2005.

¹⁸Samuel D. Rauch III, “Written Testimony for the Hearing on Magnuson-Stevens Fishery Conservation and Management Act” before the Committee on Natural Resources, U.S. House of Representatives, Sept 11, 2013. <http://www.legislative.noaa.gov/Testimony/Rauch091113.pdf>

than the lowest revenue level when classified as overfished.¹⁹ Economists at NOAA Fisheries estimated in 2011 that rebuilding all depleted fish stocks that year would have generated an additional \$31 billion in sales, supported an additional 500,000 jobs, and increased the revenue that fishermen receive at the dock by \$2.2 billion.²⁰ Clearly, the financial benefits of restoring our Nation's fish populations for fishermen and coastal communities are huge.

Decades of overfishing have diminished many of our ocean fish populations and put coastal communities that depend on them in greater economic hardship. But thanks to bipartisan efforts in Congress in 1996 and 2006 and the hard work of managers and stakeholders at the regional councils, the United States now has one of the best fishery management systems in the world. It is a system that has proven its ability to end overfishing, recover depleted populations, and provide jobs and income to fishermen and their communities. While challenges remain, it is clear that the Magnuson-Stevens Act is working, and any changes we consider must build on the recent successes and not sacrifice the advancements we have made.

Challenges

Broadening the focus of fisheries management

As discussed above, we have made a great deal of progress improving the status of individual fish populations since passage of the 2006 amendments to the Magnuson-Stevens Act. In order to ensure continued success we must maintain our commitment to science-based management that prevents overfishing and rebuilds depleted populations while broadening the focus of management to minimize the impact of fishing on larger marine ecosystems. This step will place a greater focus on restoring and maintaining the health and resiliency of the ecosystems that underpin fisheries productivity. It will require strengthening existing requirements to protect the habitats that fish depend on for reproduction and growth, and reduce non-target catch or bycatch. It also requires managing forage fish so that they are abundant enough to support the larger fish, marine mammals, and birds that depend on them for food. Finally, it requires developing a better understanding of how species interrelate with each other and the surrounding ecosystem and making fisheries management decisions that will promote the restoration and maintenance of healthy and resilient ocean ecosystems.

The need to take this step is more important and timely than ever. Our oceans face significant and numerous stressors, such as the impacts of global climate change and diminished water quality from upland uses. The impact of increased carbon in the atmosphere is having a significant impact on the ocean which sequesters 20 to 35 percent of anthropogenic CO₂ emissions.²¹ This is causing the ocean to become more acidic, which in turn is impeding the growth and survival of shell-forming marine organisms like clams and oysters and could have implications for other marine species. We are also seeing ocean waters warming which is having a profound effect on the distribution of marine organisms, especially fish. Recent studies have documented the worldwide shift of fish towards the poles and to deeper water as they seek cooler water.²² The impacts of these system stressors require a broader approach to management that ensures ocean ecosystems can support the healthy fish populations on which our coastal communities depend.

The science and tools exist to begin the transition to ecosystem-based fishery management. Managers should not wait to begin taking action. There are a number of actions that managers can take now to promote healthy ocean ecosystems.

Bycatch, is the incidental catch of ocean wildlife in non-selective fisheries. This is a key source of unaccounted mortality for many marine species. Bycatch occurs in both commercial and recreational fisheries, and is of particular concern when by-

¹⁹Samuel D. Rauch III, "Written Testimony for the Hearing on Magnuson-Stevens Fishery Conservation and Management Act" before the Committee on Natural Resources, U.S. House of Representatives, Sept 11, 2013. <http://www.legislative.noaa.gov/Testimony/Rauch091113.pdf>

²⁰Eric Schwabb, "Written statement before the Committee on Natural Resources, U.S. House of Representatives, on eight bills that would amend the Magnuson-Stevens Fishery Conservation and Management Act." Dec 1, 2011. <http://www.legislative.noaa.gov/Testimony/Schwabb120111.pdf>

²¹S. Khatiwala *et al.*, "Reconstruction of the history of anthropogenic CO₂ concentrations in the Ocean," *Nature*, 462, 346–349. Nov 19, 2009. Doi: 10.1038/nature08526. <http://www.nature.com/nature/journal/v462/n7271/full/nature08526.html>

²²For instance, see: Elvira S. Poloczanska *et al.*, "Global Imprint of Climate Change on Marine Life." *Nature Climate Change*, Aug 4, 2013. DOI:10.1038/NCLIMATE1958; Malin L. Pinsky *et al.*, "Marine Taxa Track Local Climate Velocities," *Science*, Vol 341: 1239–1242. 2013. DOI: 10.1126/science.1239352; R.D. Norris, S. Kirtland Turner, P.M. Hull, and A. Ridgwell, "Marine Ecosystem Responses to Cenozoic Global Change," *Science*, Vol 341: 492–498. 2013. DOI: 10.1126/science.1240543.

catch species are classified as overfished and in need of rebuilding under the Magnuson-Stevens Act, or threatened or endangered under the Endangered Species Act. Economically, bycatch equates to lost opportunity—it can preclude more valuable uses of fish resources and reduce future productivity by killing juvenile fish and mature reproductive fish.

In 1996, Congress added National Standard 9 to minimize bycatch and bycatch mortality, and a separate requirement to establish a Standardized Bycatch Reporting Methodology. NOAA Fisheries' 2011 National Bycatch Report, which was based on information from 2005, estimated that nationally 17 percent of the fish caught were bycatch.²³ This is likely an underestimate because bycatch data is inconsistently recorded so potentially large sources of mortality are not accounted for in either stock assessments or when counting total annual catch.

In the Southeast, struggling populations like red snapper, speckled hind, and warsaw grouper are all subject to high levels of mortality from bycatch, and the available data likely undercounts the bycatch levels. In some areas of the country, entire schools of forage fish, which provide a vital ecosystem link between small, protein-rich plankton and top predators, are indiscriminately scooped up and discarded dead in large numbers. Surface longlines in the Gulf of Mexico kill over 80 other marine species such as billfish, sea turtles and sharks along with the target yellowfin tuna and swordfish.

Bycatch mortality is particularly challenging to monitor in the recreational fishery given the sheer number of anglers who take to Federal waters off the southeast coast of the U.S. each year. In 2011, over 3 million recreational anglers took 23 million trips in the Gulf of Mexico, and over 2.3 million recreational anglers took 18 million trips in the South Atlantic.²⁴ Unlike in many of the inshore fisheries managed by state agencies, catch and release fishing in deeper, offshore waters too often results in these fish not surviving release back into the water. This is because they cannot withstand the rapid change in pressure as they are pulled to the surface. There is promising evidence from the Pacific coast that rapid descent devices may improve the odds of survival for these fish, but more research is needed to determine their effectiveness for species in the warmer waters of the southeast U.S. This is an area that could benefit from additional cooperative research between fishermen and scientists.

Quantifying and reducing bycatch must become a key mandate for Federal fishery managers if we are to recover ocean ecosystems and fully realize the economic potential of fisheries.

Forage fish are a key link in the marine food web between the microscopic plants and animals that inhabit the sea and the marine predators that eat them. Humans are inextricably linked to these tiny fish because many of these top level predators are the fish we love to catch and eat or the marine mammals and birds we love to watch. The Lenfest Forage Fish Taskforce, a group of 13 eminent scientists from around the world, spent three years conducting a comprehensive global analysis of forage fisheries and found that three quarters of marine ecosystems worldwide have predators that are highly dependent upon forage fish.²⁵ Scientists have estimated that total consumption of forage fish by the world's marine mammals can amount to 20 million tons a year,²⁶ while seabirds require roughly 12 million tons annually.²⁷ The Gulf of Mexico is home to the largest forage fishery in the nation, menhaden, but state-based regulators have resisted establishing meaningful limits to ensure this critically important fish will continue to meet its role as food for the larger ecosystem. In Florida, conservation of forage fish like mullet which support world class sport fisheries for red fish, tarpon and snook was dealt a blow by a recent Florida circuit court decision that overturned enforcement of almost 20 year old protections against the use of gillnets in state waters.

These recent actions are unfortunately typical of how the Nation manages its forage fish; paying little regard for the critical role they play in feeding the larger ecosystem. These species deserve special management that accounts for their unique

²³ National Marine Fisheries Service, *U.S. National Bycatch Report*, NOAA Tech. Memo, NMFS-F/SPO-117E, 2011. http://www.nmfs.noaa.gov/by_catch/bycatch_nationalreport.htm.

²⁴ NOAA Fisheries Southeast Regional Office, "Recreational Fishing," accessed Nov 12, 2013. http://sero.nmfs.noaa.gov/recreational_fishing/index.html

²⁵ Pikitch, E. *et al.*, 2012. *Little Fish, Big Impact: Managing a Crucial Link in Ocean Food Webs*. Lenfest Ocean Program. Washington, D.C. 108 pp.

²⁶ Kaschner, K., Karpouzi, V., Watson, R. and Pauly, D. 2006. Forage fish consumption by marine mammals and seabirds. pp. 33–46. *In: Alder, J. and Pauly, D. (Eds.). On the multiple uses of forage fish: from ecosystems to markets. Fisheries Centre Research Reports 14(3)*. Fisheries Centre, University of British Columbia.

²⁷ Cury, P.M., Boyd, L. L., Bonhommeau, S. *et al.*, 2011. Global seabird response to forage fish depletion. *Science*, 334:1703–1706.

role in supporting healthy ecosystems. As the Lenfest Taskforce found, “conventional management can be risky for forage fish because it does not adequately account for their wide population swings and high catchability. It also fails to capture the critical role of forage fish as food for marine mammals, seabirds, and commercially important fish such as tuna, salmon, and cod.”²⁸

Habitat is critical to healthy fish populations and ecosystems. It includes areas for fish to spawn, hide from predators and feed. But fishing practices like trawling or dredging can decimate essential habitats, often after just one pass. Additionally, pollution from industry or land runoff can damage the near-shore and estuarine habitats that are important nurseries for ocean fish. These essential habitats must be protected from fishing and non-fishing impacts to ensure that their essential functions are not interrupted. The 1996 amendments required NOAA Fisheries and the councils to describe, identify, conserve, and enhance essential fish habitats. While each fishery management plan describes and identifies these habitats, the designations are often so broad that their utility to focus protection efforts is limited. In addition, habitat conservation and protection is poorly integrated into fisheries management. For example, nearly the entire Exclusive Economic Zone in the Gulf of Mexico region is designated as essential fish habitat for reef fish species.

However, the South Atlantic Fishery Management Council has utilized Coral Habitat Areas of Critical Concern designations to effectively protect five areas of deepwater coral covering 23,000 square miles from fishing activity and gears that could damage these sensitive areas and to prohibit their harvest.²⁹ In addition, all three southeast regional Councils have designated small marine protected areas aimed at protecting specific species, predominantly snappers and groupers. Many of these species are particularly vulnerable to depletion due to their biological characteristics. Some, like gag grouper, are protogynous hermaphrodites, meaning all start as female and only some develop into males as they get older and larger. Heavy fishing pressure can snare many females that might potentially turn into males and throw the natural process out of balance. In the Gulf of Mexico, male gag had dropped from seventeen percent of the population in the 1970s to just two percent in the 1990s. Researchers at the Florida State University Coastal and Marine Lab found that inside the Madison Swanson Marine Reserve, an approximately ten mile by ten mile area designated over a decade ago to protect gag, that the percentage of males inside the reserve was six times higher than outside the reserve.³⁰

Gag and other species also form dense spawning aggregations in the same locations each year, which can be quickly wiped out when targeted by fishermen. Additional tools to expand protection for critical habitat, spawning fish and corals as well as funding to monitor and assess these areas could boost these populations and speed recovery of depleted species.

Improving fisheries data

The conservation provisions in the Magnuson-Stevens Act are successful because they are grounded by our fisheries science, investments in data collection, and our sound, science-based legal framework. Managers and scientists have some information about every federally-managed fish ranging from the biology, habitat preferences, distribution, and catch, to fishery independent surveys and scientific assessments of populations health. Our management system is unique in its reliance on this extensive body of knowledge, and its commitment to basing decisions on science not politics.

NOAA Fisheries has data on all federally managed fish, but the type of information varies, as commercial fisheries tend to have the most complete data sets. However, there are a number of methods to establish scientifically-sound catch limits without a full stock assessment. Catch limits can be based on average catch and the catch trends over time. If catches are stable, the limit may be set above the average but within the historical catch levels. If the catch is declining over time, a more conservative catch level may be required. Catch limits can also be set based on basic growth parameters and average lengths of fish caught. Where fish exist in groups, one assessed species from the group can be used as an indicator species to gauge the health of the whole complex. In other words, there are tools available for managers to set annual catch limits for all species, even without a stock assessment. This proactive approach is intended to prevent overfishing and population depletion.

²⁸ Pikitch, E. *et al.*, 2012. Little Fish, Big Impact.

²⁹ South Atlantic Fishery Management Council, “Deepwater Coral HAPCs,” accessed Nov 12, 2013. <http://safmc.net/managed-areas/deepwater-coral-hapcs>

³⁰ Koenig, C.C. and F.C. Coleman, “Protection of Grouper and Red Snapper Spawning in Shelf-Edge Marine Reserves of the Northeastern Gulf of Mexico: Demographics, Movements, Survival and Spillover Effects,” MARFIN Project Final Report. MARFIN project number NA07NMF4330120, 2011.

The strategy of setting limits on how many fish can be caught each year before a fish stock reaches critically low levels, should avert tougher, more painful restrictions in the future by managing fish populations wisely now.

The fact that these techniques are available does not mean we should be satisfied with the data that is currently available for management. Given the challenging budget climate in Washington, we should look toward technological or innovative solutions that will allow managers to collect and manage data more efficiently.

Many regions still rely on paper logbooks and dealer reports sent through the mail to collect information on catch. Technological solutions exist to improve the speed and accuracy of fisheries data collection, including electronic logbooks and dealer reports, vessel monitoring systems that track vessels' location and whether or not they are fishing, as well as at-sea video monitoring. Integrating these electronic monitoring systems with targeted at-sea human observer coverage and increased dockside monitoring would greatly improve the data available on what is caught where, what portion of the catch is discarded and how much is landed and sold. These systems are available now, but they are not commonly used in the Southeast. In addition to electronic data collection systems, more effort must be focused on electronic databases that could be used to receive, analyze, and disseminate fishery information in near real time. This would allow managers to react quickly to prevent catch limit overages and thus reduce the uncertainty around compliance with catch limits. Reducing uncertainty could lead to additional fishing opportunities because managers would have more confidence that the result will not exceed the science-based limit.

The public, including non-federal managers and academics, must also have access to fisheries data so that it can effectively participate in the management process. Amendments made to the Magnuson-Stevens Act in 2006 restricted access to observer data. While implementing regulations have not been finalized, the proposed data confidentiality rule would restrict disclosure of observer data to the public, and fishery management council members who are not Federal employees, leaving councils in the dark about what is being caught where. Greater transparency will lead to better council decision making.

Greater use of technology must also be supplemented with more cooperative research with the fishing industry, state governments, and the academic community. NOAA Fisheries can't continue to do the lion's share of the data collection on its own. Involving the fishing industry, both commercial and recreational for hire, cooperative research will provide more data collection opportunities. It will give the industry a better understanding of how information is gathered and scientists a deeper appreciation of on-the-water expertise held by fishermen.

Finally, Congress should explore securing a dedicated source of funding for cooperative fisheries research, monitoring, and management. Legislation introduced in the last Congress, would update the Saltonstall-Kennedy program which is funded from duties on imported fish products, and directed millions of dollars (estimated at \$85 million in FY 2013) to a newly created regional grant program. These funds would have provided the regional fishery management councils with the opportunity to identify and obtain funding for priority projects such as: stock assessments and surveys; recreational data collection; testing and deployment of environmentally-friendly fishing gear; dockside, at-sea, and electronic monitoring; social and economic research; and habitat restoration and protection. Currently the vast majority of Saltonstall-Kennedy funds are used by NOAA Fisheries to offset the cost of its fisheries data collection and management programs. Using these funds for cooperative projects would allow these funds to go farther and do more.

Reauthorization of the Magnuson-Stevens Act

As discussed above, the Magnuson-Stevens Act is working; we are turning the corner on preventing overfishing, recovering depleted populations, and moving towards a fishing industry that is both sustainable and profitable. The Act's focus on scientifically-based fisheries management has made U.S. fisheries some of the best managed in the world. While we look ahead for ways to further refine our current system, we must not alter the strong provisions that have gotten us so far. Science-based catch limits that do not allow overfishing and the rebuilding requirements are the cornerstone of our fisheries success. But while we have made a great deal of progress restoring individual fish populations, more focus must be placed on restoring and promoting healthy and robust marine ecosystems. Such a broader focus will be essential to face the challenges of the 21st century.

As Congress considers updates to the Magnuson-Stevens Act, we make the following recommendations for inclusion in a reauthorization bill:

Maintain the core conservation provisions of the Act, including requirements to:

- Prohibit overfishing;

- Rebuild overfished populations within existing, prescribed timeframes; and
- Establish science-based annual catch limits for all federally managed species with accountability measures if the limits are exceeded.

Maintaining science-based catch limits and accountability measures for all federally managed species helps ensure that populations not yet depleted or whose status is unknown will not decline. This proactive strategy of setting limits before a fish stock reaches critically low levels should avert tougher, more painful restrictions in the future. Waiting for a crisis before acting is poor fishery management. Through wise stewardship now, we can avoid overfishing and depletion of valuable fish species and the consequent economic hardship. Weakening the Magnuson-Stevens Act's conservation requirements jeopardizes the progress fishery managers, scientists, dedicated fishermen, conservation advocates, and others are making and places important public ocean resources at greater risk.

Adopt an ecosystem-based fishery management approach

Fishery management typically focuses on the most important commercial and recreational species, with an emphasis on the maximum sustainable amount of each fish that can be caught. A broader approach that considers the health of multiple species, the critical interactions among these species, and the quality of the habitat they require will help conservation of the ocean ecosystems that sustain our fisheries. A Congressionally mandated ecosystem advisory panel recommended in 1998 that each regional fishery management council develop fishery ecosystem plans.³¹ Several councils have developed these plans. However they have done so without the benefit of national guidance on what information and analysis should be included, are typically advisory, and are not always incorporated into fishery management plans.

Key Magnuson-Stevens Act modifications:

- Require councils to develop fishery ecosystem plans and specify how ecosystem-based conservation measures will be incorporated into fishery management plans.
- Prohibit the development of new fisheries or fishing in new areas unless and until the impacts of any proposed activity are analyzed and ecosystem protection measures are in place.

Strengthen requirements for assessing and avoiding bycatch

Bycatch, the unintended catch of non-target fish and wildlife, is a persistent problem for fishery managers. NOAA Fisheries estimates that 17 percent of all the fish caught in the United States are bycatch. The vast majority of this wildlife is thrown overboard dead or dying. Furthermore, despite the requirement to establish a standardized system for assessing the amount and type of bycatch in each fishery, in far too many instances information on bycatch is lacking. Strengthening national policies to adequately assess bycatch through at-sea observation, increasing access to observer data, plus avoiding bycatch in marine fisheries will lead to better informed management decisions and improved ecosystem health.

Key MSA modifications:

- Require fishery management measures to “avoid” bycatch.
- Expand the bycatch definition so that it includes seabirds and marine mammals, retained incidental catch, and unobserved mortality due to a direct encounter with fishing gear.
- Repeal limits on the access to federally funded observer data.

Strengthen requirements for protecting essential fish habitat

Healthy coral reefs, deep sea canyons, fish spawning aggregation sites, and other ocean habitats provide vital areas for fish to spawn, feed, and take shelter. Conserving fish habitat is important for maintaining healthy fish populations and productive ocean ecosystems. Yet, most management efforts in place today are insufficient for addressing the adverse impacts from fishing and non-fishing related activities in a manner that ensures essential fish habitat is healthy and functional. Strengthening the Magnuson-Stevens Act's requirement to conserve fish habitats is a fundamental step Congress must take to improve the productivity of our Nation's marine ecosystems.

³¹Ecosystem Principles Advisory Panel, “Ecosystem-Based Fishery Management.” 1998. <http://www.nmfs.noaa.gov/sfa/EPAPrpt.pdf>

Key MSA modifications:

- Require fishery management measures to minimize adverse impacts to essential fish habitat caused by fishing.
- Enhance protection of “habitat areas of particular concern” by codifying this habitat subset in the Act and prevent adverse effects from fishing activities in these areas.
- Require councils to designate and protect deep sea corals.
- Improve protection of essential fish habitat from non-fishing activities by requiring Federal agencies that fund, undertake, or authorize activities that may have an adverse effect on such habitat to minimize the adverse effects, thereby requiring action rather than the typical communication between the agency and Secretary of Commerce currently undertaken.

Ensure an adequate forage base for fish populations and marine wildlife

Forage fish serve an important role in our ocean ecosystems as an essential link between microscopic plants and animals they eat and ocean predators, such as larger fish, birds, whales and other marine mammals that consume them. Herring, menhaden, sardines, and other forage fish provide a vital food source for commercially and recreationally sought-after fish species, such as tarpon, cod, striped bass, king mackerel, and salmon. Thus, forage fish provide a significant foundation for our Nation’s fishing industry and coastal communities. However, management of many of the Nation’s forage fish populations does not account for predator needs. Congress should require fishery managers to take stock of, protect, and maintain adequate forage fish populations and then, amend or establish management plans so that they factor in the vital role of forage fish in the ecosystem.

Key MSA modification:

- Require Councils to establish measures for managing forage fish that adequately account for the role these fish play in the larger ecosystem.

Conduct thorough scientific assessments and incorporate them into a management plan before allowing a new fishery

Too often, fishing occurs on new species, is expanded into unfished ocean waters, or utilizes new gears without adequate analysis of the impact. This practice has contributed to overfishing of many species, bycatch problems, and habitat damage. Evaluating a new species’ population levels, reproductive rate, role in the food web, potential impacts of fishing, and other factors to establish an appropriate management framework in advance of allowing a fishery to begin is a common-sense approach that will help identify potential problems before they occur. In 2009, the North Pacific Fishery Management Council voted to prevent the expansion of industrial fishing in Arctic waters to limit stress on ocean ecosystems. This is a model that should be adopted in other ocean waters.

Key MSA modification:

- Establish a more conservative, science-based approach to allowing new or expanded fishing activities by prohibiting: a) introduction of new fishing gear in an area, (b) extension of fishing into current unfished areas, or (c) the reintroduction of a prohibited fishing gear into a closed area, until the Secretary of Commerce determines these new actions will have minimal adverse effects on ecosystem.

Thank you again for the opportunity to share the views of The Pew Charitable Trusts on how the Magnuson-Stevens Act is working in the Southeastern U.S. and what modifications should be made in the next reauthorization. I look forward to answering any questions you may have.

Senator BEGICH. Thank you very much. I appreciate your attendance and all of you being here.

Mr. Windes, I’m going to ask you my questions first so then we can watch the clock here so you are not caught in a box on your time for a plane. And I’m watching the clock. It’s 12:07 for you, just to give you a clock.

But let me ask you. I understand the Gulf Council—and I’m going to read some of this, some of the issues you have brought up, some of the problems, that management of red snapper for rec-

reational and charter fishing is lacking the flexibility. But there are some ideas they put on the table that are being considered by the Gulf Council, such as the days at sea program that allows those participating a certain number of days to fish per year that they would choose, the establishment of an inter-sector trading program that would allow charter boat permit holders and private anglers to trade allowable catch with commercial red snapper fishermen, as well as a tagging program.

These are a few that I've heard about. Does that start to go down the path of giving some flexibility? Tell me your thoughts on those?

Mr. WINDES. Yes, sir. Some of that does take us down the right path. Some of it to me does not. This limited number of head boats that I've signed up for, because the other boats at our marina are going to be involved in it, allows the head boats to catch red snappers out of season and that would go against their historical catch during the season.

Once again, it's almost like a divide and conquer strategy. It puts different boats at the same marina—it makes them cross swords, if you will. So I don't know if that's the best way to go. It's under trial and certainly we'll watch the progress and see how it goes.

Senator BEGICH. But you don't disagree—I just want to make sure—that there are some efforts, but they're just not all the way where you need to be at this point? But there is some sampling that's going on that, again, is helpful, but not all helpful?

Mr. WINDES. Well, yes, sir. We've been watching this for years and years, decades in fact. We all see these articulate spokesmen up here talking about what we're going to do and how we're going to do it, and here's the white paper on it and, oh, we should be implemented by such and such a time. Nothing much actually comes to fruition. It's very discouraging and frustrating for the local economies when nothing actually happens.

That's why I'm hoping that Congress can—well, there's a saying, but I better not use it—guide things along.

Senator BEGICH. There we go.

Mr. WINDES. With some helpful hints, because we just don't seem to make much progress. We get a lot of talk and not a whole lot of action.

Senator BEGICH. That's very fair.

Let me ask you, Mr. Brownlee. I mentioned in the first, and I think you echoed it and I just want to make sure—in the first panel I talked about more discussion and emphasis on the socioeconomic components, that it seems like there's an imbalance at times. Science is very important, but also there's this economic analysis that sometimes gets lost, I would say, not only in recreational, but also in commercial, as I have said also on subsistence in Alaska. Did I hear you right, that's one of your—you had four items and this was one of them. I just wanted to make sure I am saying the same thing, that there seems to be good science, but more science can be done. The economic piece is really—this is my word—lacking to where there's equity in the decision.

Mr. BROWNLEE. It's kind of a two-pronged thing, because if you have socioeconomic studies done the recreational industry almost always comes out as having the highest and best use for the Nation as a whole. When I said focus on the economics, I really mean look

at the way that Magnuson-Stevens is currently impacting small businesses. I'm most familiar with Florida. In Florida it's been a big hardship, the lack of the ability to fish for certain species. It's true in the other Gulf States as well. That is something that we need to consider, the economics of how this is affecting people.

Senator BEGICH. So for example, if a quota was reduced and therefore folks doing charters get limited out or limited in what they can—or even the size, like what we have in Alaska on some of our halibut, then those folks who are booking charters, you may have customers say “not interested.”

Mr. BROWNLEE. Absolutely. If you have a 28-day season and you're trying to plan a family trip to go somewhere, you can't do it because you may not be able to go then. There's so much uncertainty. There needs to be as lengthy a season as possible, that we can rely on, that these guys can rely on, the charter operators.

Senator BEGICH. Because otherwise, if it's a smaller, a shorter time period, you've got a lot of customers, but you only have so many boats, but they can't survive on a 28-day cycle. I'll just use that as an example.

Mr. BROWNLEE. Well, you're going to be able to take—if everybody books the boat for 1 day, you can take 28 people fishing.

Senator BEGICH. Right. So basically the longer—what you like to see over time is how you manage this for a longer season, so just predictability, because more than likely—our family is in the tourism business. You're planning your advertising a good season ahead.

Mr. BROWNLEE. Right.

Senator BEGICH. I mean, you're doing it right now, actually—

Mr. BROWNLEE. Absolutely.

Senator BEGICH.—for your season next. And when you're putting those ads in the magazines and all that stuff and then some of the rules get changed, you're hanging out there. Is that fair?

Mr. BROWNLEE. Absolutely. It's very difficult to stay on top of it because it changes so frequently.

But back to my point about counting fish and counting each individual fish, it's impossible. It's an impossible task. So we need to be more realistic about that and have stock assessments that measure relative abundance rather than absolute abundance.

Senator BEGICH. Very good.

Let me ask—Mr. Tucker, thank you. This is always—in Alaska we usually have a third person there, on subsistence. So we have commercial, charter, and then we'd have another, or recreational. How do you—with regards to you had mentioned some of the management issues. What is in your mind the biggest hurdle in managing, and then at the same time do you think folks from your industry are at the table enough? I thought it was interesting; what you said was make sure that if there are commercial fishermen that they, by requirement, their data, their information, is part of being part of the fisheries. If they don't submit it they're not part of the fishery.

Help me understand, because it seems like that is an interesting little tool there.

Mr. TUCKER. Well, it seems that way to me. That wasn't in reference to commercial fishermen. In commercial fisheries we have very rigid reporting requirements. We report a lot of data.

Senator BEGICH. That's why I was asking, because in Alaska we do it all the time.

Mr. TUCKER. In commercial fisheries, the failure—reporting the data is a condition of permit renewal. You don't submit the data, you don't get your permit renewed. OK, well, that's not onerous. But you've got—we've got 3 million recreational anglers in the Gulf of Mexico and there's no requirement to collect data from these.

Senator BEGICH. How do you visualize—let me pause you here for a second, and then my time is up here. But I understand the commercial—that we in Alaska, it's a certain amount of fleet, a certain small amount. We have enough problems trying to manage certain things. To now add 3 million reporting mechanisms—

Mr. TUCKER. Similar to the way they do it in managing migratory game. In migratory game, when I go to buy my migratory game stamp for this year—

Senator BEGICH. Yes, your duck stamp.

Mr. TUCKER. My duck stamp.

They collect data from last year, or you don't get your duck stamp. It's pretty simple. It's not onerous. Everybody does it. But for some reason it doesn't seem to be—if everybody submitted data, then the people would say: Hey, the data's good because I know because I'm submitting it. But in the absence of any submission, it's no wonder people don't like the data. The science is good, but the data needs to be improved.

I agree with Dr. Crabtree on the fishery-independent data. That's necessary. But as far as catch and effort data for the recreational sector, I think it's incumbent upon everybody to have a little skin in the game, and I don't think it's too much to ask.

Senator BEGICH. Thank you very much.

Let me pause here. I can sense the recreational guys would love to respond, but I have to move to Senator Rubio. Maybe you could respond in one of his questions.

Senator RUBIO. My first question is, if I—this is particularly for Captain Windes, Captain Johnson, and Mr. Tucker. If I gave you this notepad, could you write the coordinates for the best spots out there? I won't give them to anybody. It's just for me, make me look like a hero.

[Laughter.]

Senator RUBIO. I'm kidding. Trade secret.

Anyway, let me just ask Commissioner Windes real quickly because I know he's got to catch a plane, and I think the answer to this is obvious. Just talk a little bit more about the economic benefits in the county that the fishing industry provides? The reason why I ask you that—and I guess the follow-up is, and I would ask this of the entire panel—do you think that the economic impact should be more closely considered when these fishery management plans come out?

Mr. WINDES. Absolutely. In our particular county we have a population of about 190,000 people. Our economic engine is driven by three sources: tourism, fishing, boating, beaches in the south end;

the military, Eglin Field in the center; and agriculture, cotton, soybeans, corn, all in the north end. So the bay divides us.

The percentage that our county depends on tourism is very substantial, a third or more, probably 40 percent. These coastal families and businesses have suffered drastically in the last, well, 10 years or so as these restrictions have tightened, as these bag limits have become less and less and the days of the season has gotten shorter. So it has a domino effect or a trickle-down, whatever you want to call it. But it just, it has a devastating effect on our county's ability to have revenue.

Senator RUBIO. Just following up on that, for Mr. Brownlee, our management system requires that we take into account the best available science, but oftentimes, especially in recreational fishing, that's just not available. So is it reasonable to expect that under this current system we have we're ever going to have enough data to successfully manage recreational fishing? Or are there smarter ways of doing business?

Mr. BROWNLEE. The best available science is a catch-all term that really has not a lot of meaning, because there is no science on the vast majority, frankly, of species that are under management in one place or another. I believe the Caribbean Council, who is represented here today, has never had a stock assessment ever. So there's a great deal of management going on where we're winging it, and it doesn't work.

Back to the question on economics, I think it's vital that we have economics factored into every decision that we make and what the highest and best use of that fish is. We believe the recreational fishery does offer that highest and best use in almost every case.

In terms of science, we need to fund more science. We need to have a lot more stock assessments going on. But I also do believe that there's efficacy in having the states manage certain species because I just think they can do it better than the Federal Government has shown that they can.

Senator RUBIO. Captain Johnson, something stood out to me in your testimony. You talked about the closures in the black sea bass fishery during the winter months had a greater impact on Florida than, for example, the Carolinas. Just elaborate on that a little bit? What is it that's so unique about Florida's fishery management?

Mr. JOHNSON. Well, people come to Florida in the winter. Of course, it's cold down there today, or yesterday. But that's usually why people come in the winter months. And we had a winter fishing business. It really affected the for-hire fleet and the recreational guys because the black sea bass is something that's easily accessible. It could be found relatively close to shore, it didn't cost a whole lot of money to go after them, and it was just a real popular recreational fish. And it bites best in the winter in Florida. That's when they bite.

So they really took away the best months out of every calendar year for fishing for black sea bass through the management decisions that they put in place.

Senator RUBIO. Mr. Tucker, do you think the individual fishing quotas, what they call catch shares, is that something that should remain a tool for us in the regional councils?

Mr. TUCKER. Absolutely, without a doubt. It's taken—it's the only tool I know of where they've reduced the quotas and they've managed to extend the seasons to a year-round basis. There's nothing that touches it.

Senator RUBIO. Finally, Mr. Crockett. As you know, it has become a common practice for the administration to divert in their annual budget Saltonstall-Kennedy funds received by NOAA away from the authorized uses and into the agency's operational and research fund. We've had testimony and questions about that here before and we've had those administrative officials before us.

But I guess my question is, do you agree with this diversion or do you think these funds would be better used for their intended purposes, in addition to the funds appropriated by Congress to NOAA for fisheries research?

Mr. CROCKETT. No, we don't think that's an appropriate diversion. It's not the intended purpose of the law when it was first enacted. NOAA now says that they're using that money for all these great data collection programs, but 3 years ago when Congress asked them they couldn't tell you where the money went. It just went into their operating budget.

There was legislation introduced last Congress by Senators Snowe and Kerry to take that money and turn it into a regional grant program to fund priority research projects that the councils would identify for stock assessments, recreational data collection, habitat protection, developing new gear, a variety of things like that. I would strongly consider, suggest to this committee that they ought to take a look at that legislation and perhaps bring that into the reauthorization debate, because the idea of that program was to take this money and use it to focus on regional priorities, and it gave priority to public-private partnerships.

I agree with a bunch of the testimony today about we need more data and especially data on economics and recreational fishing, and this would be a pot of money for collecting that type of information and using it—doing it in such a way that it's the government and the private sector and the State governments doing it. I think that's the best way to sort of gather the information that we can improve management with.

Senator BEGICH. Thank you very much. Actually, I was listening to your commentary. As someone who sits on the Appropriations Committee, this is always the challenge. I agree with your comments and Senator Rubio's that over the years—and I can tell you, the harbor maintenance program also. They go in there and they tax for the harbor maintenance and then they steal half of it for who knows what, some other Federal program that was totally unintended. Then when you ask the agencies, they always have some reason why: Well, no, it is connected in some way. And they give you a long list of reasons.

So you bring up a good point, something that we should look at within this legislation, and then as an appropriator maybe what we can do to ensure that those funds go where people anticipated those funds to go, which, honestly where—I would say on a variety of issues, I think Senator Rubio would agree with me on this, that why the public is so mad at the Federal Government in many different ways is we say something and then when the money's allo-

cated, then it goes to somewhere else. And people say: Well, that's not what I thought it was for. They don't get the value for the money they put in. You bring up a good point.

Mr. CROCKETT. That's exactly right. I think your position on the Appropriations Committee would be very helpful because that committee has not been that receptive to this legislation.

Senator BEGICH. That's right.

Mr. CROCKETT. So that would be helpful. While NOAA now says it's using this money for a bunch of data collection programs, I think the big difference here again is taking those decisions on how to spend that money out of Washington, taking it to fund regional priorities, and then prioritizing public-private partnerships.

Senator BEGICH. It may not be bad ideas they have. But really what you want is, why you've got these regional councils set up, is to give input and help direct some of this resource, because they're on the ground day to day and talking to fishermen and listening to what's going on in the markets and trying to figure out what the right approach is.

Mr. CROCKETT. Absolutely.

Senator BEGICH. I'm new on Appropriations this year, so hopefully they'll keep me on there after I start stirring it up a little bit. But we'll see.

Mr. CROCKETT. Let's hope so.

Senator BEGICH. First I want to say to all of you, thank you. Fisheries, there's nothing simple about it. The good news is I think the Magnuson-Stevens Act is a good baseline. But there are improvements that need to be done, there is no question about it, in a variety of areas. But I do think at the end of the day—I know Senator Rubio and myself and our staffs are working closely together to make sure as we move forward on this that we do it in a thoughtful way so it's not just a reaction, but something down the road we can look back 10 years later and say we not only listened to advice, we took it forward and improved on what was there.

Again, as I said to the earlier panel, it's one reason why we haven't laid down a bill yet like the House. We want input. So many times I get complaints—I don't know if Senator Rubio does—we put a bill down and then people say, why didn't you ask us. So what we want to do is do something that may be a little different in Washington, ask you first, get your input, and then try to figure out what the right approach is here.

It may not be perfect at the end of the day, but we know if we can get something on the table after getting all this input then we can move forward and try to refine the final steps. So your testimony today and the panel before you is very helpful for both of us. So I just really want to thank you for that.

I think the record will be open 2 weeks. The record will be open for 2 weeks for other members and ourselves to submit additional questions if necessary. Again, I want to thank you all for attending this morning's hearing.

At this time, the hearing is adjourned.

[Whereupon, at 12:26 p.m., the hearing was adjourned.]

A P P E N D I X

WRITTEN STATEMENT OF THE GULF SEAFOOD INSTITUTE

The Gulf Seafood Institute (GSI) is pleased to present the following written testimony on the reauthorization of the Magnuson Stevens Fishery Conservation and Management Act, or MSA. As a voice for the Gulf seafood communities in Texas, Louisiana, Mississippi, Alabama and Florida, the GSI maintains that, overall, the MSA is working. However, there are areas where changes must be made to ensure the long-term sustainability of both our Nation's fisheries and of the vast economy that our fishermen support.

The mission of the Gulf Seafood Institute is to protect the Gulf's unique culture and environment while elevating the Gulf seafood brand with consumers, customers and policy leaders through advocacy, education and science. The GSI's board of directors represents every Gulf state as well as every aspect of the industry—both commercial and recreational—and is positioned to be a leading voice on key issues including sustainability, seafood safety, disaster mitigation and recovery, and data collection. Additionally, GSI will seek to bolster fisheries science and research that will help preserve the Gulf seafood resource and contribute to the longevity of the industry overall. The GSI came together in July 2013 and is currently taking the steps necessary to organize under the laws of the state of Louisiana and will then seek approval of the IRS for determination of approved 501(c)(6) status.

When it comes to ensuring the sustainability of our Nation's fisheries, GSI maintains that the process outlined under MSA is working. The Department of Commerce, the National Marine Fisheries Service (NMFS) and the eight Regional Fishery Management Councils work together to monitor, manage and enforce a program that has led the United States to its position as a global leader in responsibly managed fisheries and sustainable seafood. Guided by 10 National Standards of sustainability, these agencies monitor, manage and legally enforce all marine fisheries in the United States under the most restrictive regulations in the world. As a result, U.S. fish populations are rebuilding and overall fish abundance is improving. According to NOAA's most recent Status of Stocks report issued to Congress in 2012, thirty-two fish stocks in the U.S. have been rebuilt since 2000 meaning that routine stock assessments conducted by fishery scientists indicate that the abundance of the stock is above the maximum sustainable yield. This is good news not only for our Nation's fishery resources but also for the fishermen, consumers and business supply chain that rely on healthy and wholesome seafood harvested from U.S. waters.

As Congress moves forward with reauthorizing MSA, GSI would like to see the following issues addressed in draft legislation:

Flexibility in Rebuilding Timelines:

- Timelines for rebuilding fisheries must be relaxed to enhance flexibility for fishery managers. The current MSA requirement for rebuilding overfished fisheries within ten years, with certain exceptions, is an arbitrary time frame and totally unrelated to the biological needs at hand. Similarly, the requirement to end overfishing immediately considers no other factors. These strict, arbitrary timelines for rebuilding fisheries lead to significant disruptions for the seafood community while the fishery is usually capable of a far more gentle transition.
- A recent National Research Council (NRC) report issued in September 2013¹ addresses the existing rebuilding needs and realities. GSI is in full agreement with NRC's recommendations pertaining to a biologically-based approach to rebuilding plans. We urge incorporation of those recommendations into the re-

¹National Research Council. Division of Earth Life Sciences. Ocean Board. *Evaluating the Effectiveness of Fish Stock Rebuilding Plans in the United States*. Washington, D.C.: U.S. National Academies Press, 2013.

vised MSA. Establishing a biological basis to rebuilding strategies is a fundamental change to achieve success for the fish stocks and the populace.

Annual Catch Limits:

- The process for establishing ACLs should be revised to increase flexibility, particularly in cases where a fish stock lacks enough data to make sound management decisions.
- In order for fishery managers to set appropriate ACLs, data collection must be improved by accounting for actual “take,” both retained and discarded. While upcoming revisions of the National Standard 1 Guidelines might well address this concern, it should be explicitly defined in MSA.

New Funding Sources:

- Monies collected from marine enforcement actions and permitting fees should stay within the region in which they were collected and *not* be transmitted to the general fund. These funds should be managed by the relevant Regional Fishery Management Council.
- Balance should be incorporated into MSA’s enforcement language to ensure that the collection of fines does not drive the process, but instead helps to achieve the true objective of 100 percent compliance and \$0 in fines.

Role of Science and Statistical Committees:

- In today’s fast-moving world, we should be able to react swiftly by calling SSC and other Council meetings in a more timely manner. The current 28-day notice period for meetings should be more flexible to help address very time-sensitive matters quickly and efficiently. The process is overly long and needs better integration with the demands of NEPA requirements to achieve a balance in time, public access, and reasonable deliberation.

Regional Fishery Management Council Accountability:

- Strict accountability measures should be established for the Councils and their actions. Measures might include a revision of the Council membership and appointment process to ensure fair and equitable representation from both the commercial and recreational communities as well as consumers. This could be accomplished by simply reinserting the expired subparagraph Sec. 302(b)(1)(D)(i) from the current MSA.

The GSI looks forward to working closely with the Senate Commerce and House Resources Committees over the next several months to address these and other relevant issues as MSA reauthorization moves forward. For more information, please feel free to contact our interim Chairman of the Board Harlon Pearce.

SOUTH ATLANTIC FISHERMEN’S ASSOCIATION
Little River, SC, November 18, 2013

Hon. MARK BEGICH,
Chairman
United States Senate
Senate Commerce, Science, and
Transportation Committee
Subcommittee on Oceans, Atmosphere,
Fisheries, and Coast Guard
Washington, DC.

Hon. MARCO RUBIO,
Ranking Member
United States Senate
Senate Commerce, Science, and
Transportation Committee
Subcommittee on Oceans, Atmosphere,
Fisheries, and Coast Guard
Washington, DC.

Dear Chairman Begich and Ranking Member Rubio:

On behalf of the South Atlantic Fishermen’s Association (SAFA), which represents fishermen and other stakeholders in South Atlantic fisheries, I would like to request that the attached statement from SAFA regarding the upcoming reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) be included in the record of the November 14, 2013 hearing entitled, “Southeast Regional Perspectives on Magnuson-Stevens Reauthorization.”

SAFA is a supporter of the MSA and believes that participation in the reauthorization process is an important role for the organization and its members. For that

reason, we welcome the opportunity to work closely with the Committee and Subcommittee as it develops its reauthorization bill.

Sincerely,

MATTHEW RUBY,
Commercial Fisherman, President,
 South Atlantic Fishermen's Association.

cc: The Honorable Jay Rockefeller
 The Honorable John Thune

ATTACHMENT

STATEMENT OF MATTHEW RUBY, COMMERCIAL FISHERMAN AND PRESIDENT,
 SOUTH ATLANTIC FISHERMEN'S ASSOCIATION

The South Atlantic Fishermen's Association (SAFA) offers this statement regarding the upcoming reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). As the Subcommittee considers changes to improve the MSA, SAFA wants to focus its comments in two areas: (1) ensuring a suite of tools, including catch shares, are available to regional fishery management councils and (2) improving data collection and science in fisheries management. SAFA believes that each of these two elements is crucial to any successful reauthorization of the MSA.

SAFA is a growing organization made up of fishermen and seafood lovers from North Carolina to the Florida Keys. We work to protect the Southeast's fishing heritage by advocating for sustainable year-round fishing rules, collecting better fishery science, and connecting consumers and businesses with fishermen to improve the abundance and accessibility of local seafood. We also want to pass on our fishing heritage to future generations.

Commercial fishing in the South Atlantic is an important part of the economy, and local fishing supports jobs and the seafood industry, generating more than \$7 billion in annual sales and supporting 137,000 jobs. Unfortunately, those jobs and economic activity are in jeopardy because current management is not working, and as a result, the commercial fishing industry is facing difficult times.

Many fisheries in the South Atlantic are failing. Catch limits are increasingly exceeded. Fishing seasons are getting shorter. In the race to fish, fishermen have been less successful in targeting species, thereby increasing regulatory discards. As revenues are decreasing from these factors, fishermen's costs are increasing. Consequently, commercial fishermen in the region are losing their jobs and businesses, and local businesses in communities that rely on the fishing industry are suffering.

Too many of our key snapper grouper species have closed for the year. The closures are as follows: Golden tilefish on May 5, the jacks complex (lesser amberjack, almaco jack and banded rudderfish) on June 18, gray triggerfish on July 7 (except for 16 open days in late October/early November), snowy grouper on August 10, red snapper on October 8, gag grouper on November 13, and bluerunner on November 14. With a split season, the vermillion snapper fishery was closed from February 13 to July 1 and now is operating under a 500 pound trip limit as of October 16, 2013 because 75 percent of the quota has been caught. These closures are illustrative of the failures of current fisheries management to make fishing a sustainable, year-round enterprise in the South Atlantic.

Operating a successful commercial fishing business, providing for seafood consumers, and feeding our families is nearly impossible with so many fisheries closures. Thus, once again South Atlantic commercial fishermen are seeing the inefficiency of the current fishery management system at work. The recent string of early closures highlights the need for us to explore other fishery management options that would enable year-round fishing.

The vermillion snapper, golden tilefish, and black sea bass fisheries are derbies, where fishermen race against each other to catch as many fish as possible before the total catch limit is reached and the season closes. This is dangerous. It forces us to fish in bad weather. It is less profitable because our costs are high and fish prices are typically low because the market is flooded. The derbies are hard on fishermen, our vessels, and the environment. This approach to fisheries management is not good for fish or fishermen.

We want management that gives commercial fishermen flexibility and more time on the water. We want year-round fisheries so we can go fishing when the weather and the markets are most favorable. We want to explore new gear and fishing techniques that could enhance efficiency and environmental protections. We don't want

to waste valuable resources because of regulatory discards. We want more predictability and stability in our businesses.

SAFA believes it is critical that catch share programs—which were first explicitly authorized in the last MSA reauthorization—continue to be a management tool available to the regional fishery management councils. Catch share programs are proven to be an effective market-based approach for improving the economic viability of fisheries *and* the conservation of fishery resources.

In every region of the country, catch shares have been shown to increase season lengths, improve safety, increase yields and revenues, reduce bycatch and discards, and improve full-time employment in the fisheries. Given their demonstrated success in other regions, it is critical that all regions—and especially the South Atlantic—continue to have catch share management as an option. We strongly oppose any effort in Congress that would prohibit funding for catch shares or seek to prohibit fishermen from working with the regional fishery management councils to develop and/or implement catch share programs.

We acknowledge that catch shares may not be appropriate in every fishery. However, under the circumstances, with traditional fisheries management failing, we do not see any justification for Congress to limit fishery management options. In enacting the MSA in 1976, Congress created a unique structure whereby initial management responsibility was given to eight regional councils comprised primarily of stakeholders in the fisheries managed by those respective councils. Taking away the ability of local stakeholders—the people most impacted by these management decisions—to help manage their own fisheries is inconsistent with the MSA's intent. It is wrong for Washington, D.C. to dictate to these various regions which measures they can consider and which measures they cannot. All options should be available to the regional councils.

We are asking Congress to allow regional fishery management councils to do the work of managing and conserving these fisheries, with input from fishermen and other stakeholders in the regions who truly understand the importance of these valuable natural resources and rely on them to provide for their families and for seafood consumers.

The red snapper fishery in the Gulf of Mexico is a close-to-home example of the substantial benefits of catch share programs. For decades the Gulf of Mexico Fishery Management Council tried to reduce the decline of red snapper stocks through a number of management options, such as fishery closures, limiting the number of commercial licenses in the fishery, and restricting the size of fish that could be caught. None of those measures worked. Instead, those traditional management tools simply endangered fishermen, who raced to harvest as much red snapper as possible in the short time allowed, further depleted red snapper stocks, depressed fish prices, and unnecessarily killed other fish and marine life not intended for harvesting. The Gulf Council implemented a catch share program that took effect in 2007. Since then overfishing has ended and the red snapper stock has begun its recovery. The commercial sector is accountable and adheres to its catch limit every year. The commercial fishery operates year-round and is safer and more profitable. It is a win for the environment and a win for the industry.

SAFA is simply asking for the same opportunity in the South Atlantic—to be able to evaluate catch share management—instead of legislatively being forced down the path of having to try the same failed conservation and management techniques that did not work in the Gulf. The future of our region's commercial fishing industry is at stake. We need fisheries that are healthy and sustainable over the long term—both for the fish as well as for the fishermen—and catch shares are a management tool that could help us achieve this.

Finally, we also wish to express our support for changes to the MSA that would improve data collection and the science upon which management decisions are based. Rep. Rob Wittman introduced a bill in the House, H.R. 3063, which would require more frequent stock assessments, improve fisheries science by allowing fishermen to provide data that could be incorporated into stock assessments and other scientific studies, and provide for cost-effective fishery monitoring and transition of monitoring costs from government to industry. More data and better science will enable fishery managers to make more informed decisions, and allowing fishermen to more actively participate in that process will result in more collaboration between fishermen and fishery managers. Moreover, it can improve the trust between fishermen and regulators. For these reasons, we fully support H.R. 3063 and urge the Subcommittee to consider similar measures in the Senate as a way to improve data collection and enhance fisheries management through better science.

Thank you for your consideration and SAFA looks forward to working with you again this year to improve the future health of our Nation's fisheries, enhance jobs in the industry, and improve the economic viability of its fishermen.

December 1, 2013

Chairman MARK BEGICH,
U.S. Senate Committee on Commerce, Science, and Transportations'
Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard
Washington, DC.

Re: "SOUTHEAST REGIONAL PERSPECTIVES ON MAGNUSON-STEVENS REAUTHORIZATION."

Chairman Begich and Fellow Committee Members,

This letter represents the owners of the last two remaining commercial seafood docks located in Port Canaveral on the East coast of FL, their hundreds of small business commercial fishermen, and their thousands of non boating consumers who depend on commercial fishermen for this impeccable protein source. Port Canaveral was established in the early 1950s as a 'Commercial Fishing & Military Port. Today this Port is it on its way to being the largest Cruise Ship Port in our Nation. So we as commercial fish houses are trying to maintain a delicate balance between the forward motion of change & development and raising the awareness of the Federal Government to the importance of protecting one aspect of the food supply through commercial fishing.

We listened attentively to this hearing as it is discussing our region of the United States. To our frustration we did not hear much reference to commercial fishing and almost nothing regarding the South Atlantic, with the exception of the SAFMC Chairman. While there were many references to MSA not working for the Recreational Sector, please know it is not continually productive for the Commercial Sector either.

Look at the state of affairs in the South Atlantic; Red Snapper has now been closed for over 3 years. The devastation and damage this continual closure has caused is no less than criminal. The South Atlantic Council closed the red snapper fishery on a 7-6 vote over 3 years ago; common sense will tell you there was considerable conflict regarding this decision from the beginning. So now we are 3+ years from that incredible decision and we are given 3 days, here and there to fish for red snapper, because our already less than perfect science has *NONE* or very limited data to even begin to extrapolate the condition of this fishery. So on "7-6 vote," we damaged jobs, coastal communities, culture, restaurants, bait & tackle shops, fuel companies, marine repair shops, and most of all the *FOOD SUPPLY!* Magnuson-Stevens goal must be to strive for optimum sustainable harvest of this valuable natural resource that supplies this Nation with the "cleanest, safest protein source in the world" per Dr. Steve Otwell, University of Florida.

In the next table you will see current closures in the South Atlantic, with the percentage of ACL met by species. So please note the South Atlantic Red Snapper ACL is 21,447 lbs. of gutted weight (compared to the 11 million pounds in the Gulf of Mexico). The South Atlantic Red Snapper ACL has been drastically adjusted downward due to multiple scientifically derived precautionary factors. Discard mortality rate is a major reduction factor that the Southeast Science Center has admitted (SAFMC council meeting) cannot be calculated because the models are not meant to work with such small amounts of data. Again, common sense says we are impacting jobs, businesses, people's lives, the food supply on information that is less than stellar, under the guise of "best available science".

Current Commercial Fishing closures in the South Atlantic—*taken from the NOAA site, (http://sero.nmfs.noaa.gov/sustainable_fisheries/acl_monitoring/commercial_sa/index.html)*

Commercial	Total Landings	ACL		% of ACL	Current Status
Blue runner	182,444	177,506	ww	102.78	CLOSED
Gag (h)	315,911	326,722	gw	96.69	CLOSED
Golden tilefish (j)	539,422	541,295	gw	99.65	CLOSED
Goliath grouper	—	0	ww	—	CLOSED
Gray triggerfish	278,713	272,880	ww	102.14	CLOSED
Jacks (c)	315,190	189,422	ww	166.4	CLOSED
Nassau grouper	—	0	ww	—	CLOSED
Red Snapper	23,489	21,447	gw	109.52	CLOSED
Snowy grouper	84,748	82,900	gw	102.23	CLOSED
Speckled hind	—	0	ww	—	CLOSED
Warsaw grouper	—	0	ww	—	CLOSED

When looking at the Reauthorization of the Magnuson-Stevens Act, at minimum we think the following is necessary:

1. *Science* that is beyond reproach, not just extrapolated. This must include cooperative science inclusive of all sectors.
2. *Flexibility* in rebuilding stocks. Reduce the opportunities for “eNGOs” to sue NOAA for not meeting rebuilding schedules.
3. Place more emphasis on the *economics* of the individuals, businesses and communities that are dependent on this valuable natural resource.
4. *Never* allow a moratorium on a fishery. Red Snapper on the east coast is a poster child for why this does not work.
5. *MPAs* (Marine Protected Areas): there must be undisputable science that supports implementation of an MPA. MPAs *must have sunset dates* of no greater than 10 years, after which, scientific evidence must support their renewal. MPA creation must require a super majority to pass in council.
6. If we are truly implementing Magnuson for healthy fisheries management, we must have accountably among all sectors. So if VMS, (vessel monitoring systems), are important for managing a stock then it needs to be implemented on all sectors that access that stock. If one sector needs to report all of their fish electronically then so do the other sectors.
7. There must be as much pressure to optimally and sustainably harvest this valuable natural resource, as there is to not overfish it.

The fisheries in the Southeast Region are a complex, emotionally and politically charged mixture of recreational, commercial and charter usages. We have to quit eliminating this industry & culture by making data poor decisions both on the stocks and the economics. This opportunity to reauthorize and refresh Magnuson-Stevens is now and we must get it right. This is the people of this Nation at risk.

Sincerely,

MICHAEL S. MERRIFIELD,
Cape Canaveral Shrimp Co., d.b.a., Wild Ocean Seafood.

SHERYLANNE MCCOY,
Cape Canaveral Shrimp Co., d.b.a., Wild Ocean Seafood.

JIM BUSSE,
Seafood Atlantic.

LINDA BUSSE,
Seafood Atlantic.

JEANNA MERRIFIELD,
Cape Canaveral Shrimp Co., d.b.a., Wild Ocean Seafood.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARCO RUBIO TO
DR. ROY E. CRABTREE

Question 1. Given the remarkably tumultuous twists and turns of Federal red snapper management decisions in the Gulf over the last several years and the demands of all 5 Gulf State Governors and numerous Senators and Members of Congress for increased state management of this fishery, is there not a way to better integrate innovative state management in this important fishery?

Answer. NOAA supports the states' interest in assuming greater responsibility for recreational red snapper management, and has actively worked through the Gulf of Mexico Fishery Management Council process to help the states reach agreement on an approach that works for all. As you know, there is currently broad interest in a regional management strategy that would allocate the recreational catch limit among the states, then delegate each state the authority to manage its individual allocation to better serve local needs while meeting Gulf-wide conservation goals. But the Gulf Council has not yet finalized such a proposal because the states are still working to determine the appropriate state-specific allocations. Once the Council develops a proposal, it will submit it to NOAA for review.

The Gulf Council is scheduled to discuss regional management again in February 2014, and may hold additional public hearings before approving a final proposal. Any proposal to be implemented for the 2015 fishing season should be approved by June 2014—and no later than October 2014—to enable NOAA sufficient time to publish implementing regulations.

If properly implemented and supported by the states, a regional management strategy could effectively resolve the current challenges created by inconsistent state jurisdictions and regulations. However, the benefits of such a strategy (and other alternative approaches to status quo management) may be limited by Section 407(d) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), which requires the red snapper recreational fishery to be closed for the remainder of the fishing year when the overall recreational quota is met, regardless of whether or not a state has met its allocated portion of the recreational quota. The language of Section 407(d) does not take into account the new catch limit and accountability provisions included in sections 302(h)(6) and 303(a)(15), which were added by the 2006 amendments to the Magnuson-Stevens Act (P.L. 109-479), and which afford the same broad protections found in Section 407(d) while providing much greater flexibility in implementation.

Question 2. The Councils in the South Atlantic and Gulf of Mexico seem unable or unwilling to consider reallocations of mixed-use fisheries. Most of these allocations are decades old. Do you view this as a problem and if so, what does NOAA think should be done to remedy the situation within or without MSA?

Answer. Reallocation is a controversial issue because it is often perceived as benefitting one sector at the expense of another and there are many different perspectives on what is fair and equitable and in the best national interest. NOAA believes the allocation of fishery resources among user groups is a regional decision requiring the expertise of the regional fishery management councils and consideration of specific fishery goals and objectives. However, in response to a letter from Senator Vitter, Secretary of Commerce Penny Pritzker and Acting Assistant Administrator for Fisheries Sam Rauch recently reiterated to the councils the importance of reviewing fishery allocations on a regular basis to ensure fishery management is achieving the goals of the Magnuson-Stevens Act.

NOAA has produced technical papers in support of allocation discussions and presented information to the Gulf of Mexico Fishery Management Council on the fundamentals of allocation in June of 2012. That council reallocated gag (2008), red grouper (2008), greater amberjack (2008), gray triggerfish (2008) and black grouper (2012) between the commercial and recreational sectors in recent years, and is currently reviewing the king mackerel allocation. Also, the Gulf Council has been discussing the red snapper allocation for several years. In keeping with NOAA's commitment to work with the councils on allocation issues, NOAA National Marine Fisheries Service (Fisheries) Southeast Regional Administrator Roy Crabtree asked the Gulf Council to reinstate discussion of the red snapper allocation at their February 2014 meeting. To support that discussion, the agency presented preliminary information on the potential economic effects of red snapper reallocation to the Council's Socioeconomic Scientific and Statistical Committee in November 2013 and is scheduled to have a follow-up discussion with that committee in January 2014.

The South Atlantic Fishery Management Council established new commercial/recreational allocations for most federally managed species in recent years, including black sea bass (2006), red porgy and snowy grouper (2008), gag (2009), golden tilefish (2010), and the remaining snapper-grouper species, dolphin, and wahoo (2012). During its December 2013 meeting in Wilmington, North Carolina, the South Atlantic Council approved for scoping an amendment that would review the current Spanish mackerel allocation. Also, the South Atlantic Council discussed amendments that would review current allocations of dolphin, wahoo and snapper-grouper species, and asked NOAA Fisheries to present on this topic at its April 2014 Scientific and Statistical Committee meeting; specifically about the availability of data to support analyses of reallocation impacts.

NOAA would support any allocation proposed by the Gulf or South Atlantic Councils if it is fair, and equitable, as required by the Magnuson-Stevens Act, and is consistent with the Council's allocation policy and fishery objectives.

Question 3. What percentage of the NOAA fleet will be used this year to address fishery data collection in the Gulf of Mexico and South Atlantic? Please provide the number as a percentage of both the total fleet and the number of total days of the year as compared to the other council regions in the United States.

Answer. The table below shows the number of planned days at sea for fishery and ecosystem data collection aboard NOAA ships in Fiscal Year 2014 broken down by fishery management council region. These are based on the draft FY 2014 Fleet Allocation Plan as of December 16, 2013. The FY 2014 days at sea breakdown could change mid-January pending final appropriations.

Council Region	Days at Sea	% of Total
New England & Mid Atlantic (NEFSC)	171	20%
South Atlantic (SEFSC)	49	6%
Caribbean (SEFSC)	0	0%
Gulf of Mexico (SEFSC)	225	26%
Pacific (NWFSC & SWFSC)	155	18%
North Pacific (AFSC)	138	16%
Western Pacific (PIFSC)	119	14%
<i>Total Fisheries-related Days at Sea</i>	<i>857</i>	<i>100%</i>

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. TIM SCOTT TO
DR. ROY E. CRABTREE

Question. Dr. Crabtree, you stressed in your testimony the need for the highest quality fishery science. Pretty much everyone here agrees we need even better data and research to better understand the realities of the stock levels and to set more realistic quotas. The Southeast Region manages more species than any other region in the country, but it is my understanding that it receives the least amount of funding. Can you comment on how determinations are made within the Fisheries Service about how to allocate resources for research and data collection?

Answer. While the Southeast Region manages more species than any other region in the country, it is an unfortunate misconception that they receive the least amount of funding. Overall, NOAA allocates funds for research and data collection across all of the fisheries science centers to address the most critical and urgent needs. Investments in research and data collection specifically for the Southeast Region are substantial and come from a combination of major budget lines distributed across all fisheries science centers.

For example, in FY 2013, out of the six Science Centers, the Southeast Fisheries Science Center (SEFSC) received 18 percent of the funds from the Expand Annual Stock Assessment budget line, 24 percent of the Survey and Monitoring funds, and 29 percent of the Cooperative Research Program funds. This represents the largest proportions of funds distributed to a single fisheries science center from these major research and data collection budget lines. Additionally, the SEFSC receives funds from several budget lines directed 100 percent towards the Southeast, such as the Southeast Area Monitoring and Assessment Program and the Marine Resources Monitoring, Assessment, & Prediction Program.

Finally, over the past several years, NMFS has focused funds toward research on advanced sampling technologies, especially in the Southeast where many stocks are in habitats currently inaccessible using conventional survey techniques. The FY 2014 President's Budget request included additional funds in the Expand Annual Stock Assessments budget line to further develop these advanced sampling technologies and alternative sampling platforms to improve surveys and increase data quality. Progress is continually made and NOAA is dedicated to furthering its investments in research and data collection in this region for years to come.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARCO RUBIO TO
DOUGLASS BOYD

Question 1. Could you please describe what sort of socio-economic data your councils look at when considering new fishery management decisions? Do you get data specifically addressing recreational fishing and sportfishing-dependent businesses? Do you think NMFS should do a better job of providing such information to the Councils?

Answer. Relative to the amount of resources allocated to addressing biological components of fisheries management, there is a dearth of resources dedicated to socioeconomic analyses, studies, and data collection efforts. In this era of limited financial resources, the Council hopes that more funds would be allocated to NMFS to address economic and socio-cultural issues in fisheries management.

Currently, we use a range of datasets in considering fishery management decisions. These include:

- Accumulated landings system (from dealer reports) and logbook data; both provided by the Southeast Fisheries Science Center (SEFSC)
- Marine Recreational Fisheries Statistics Survey (MRFSS)/Marine Recreational Information Program (MRIP), including separate effort estimates for private and for-hire vessels
- Headboat Survey, SEFSC Beaufort Lab
- Permit data, Southeast Regional Office (SERO) permit office
- Individual fishing quota (IFQ) program database, SERO
- Recreational Choice Experiments Surveys (SEFSC)
- Economic add-on to logbooks (SEFSC)
- Social indicators database, SERO
- Census Bureau

These various datasets are augmented by surveys and reports, such as those produced through Marine Fisheries Initiative (MARFIN) grants.

The data used from these sources depend on the issue being analyzed. More information is available for commercial fishing than recreational fishing. In part, this is due to Federal permit requirements for commercial vessels and dealers. To maintain these permits mandatory reporting via logbooks or dealer reports is required. On the other hand, there is no such Federal permit nor requirements for individual recreational anglers to provide information. Most recreational anglers agree that improved data collection systems are needed. However, there is a delicate balance between the needs of Federal fishery managers to obtain recreational data, and the privacy concerns of recreational anglers who may not wish to provide such information to the Federal Government.

Within the recreational sector, federally permitted charter vessels and headboats are the businesses most dependent on federally managed sport-fishing. These vessels are required to possess a Federal permit. In addition, headboats are required to report their landings electronically. The Council recently completed an action to increase the reporting frequency of headboats to no less than weekly. The Council is also working on an amendment to require electronic reporting by charter vessels. Although such data from charter vessels would be valuable for socioeconomic analyses, some for-hire operators may consider it confidential.

While it would be useful to have more data on sport-fishing dependent businesses, such businesses likely cater to all anglers, regardless of target species or frequency of fishing activity. For example, the local popularity of state-managed species (spotted seatrout, red drum, snook, flounder, etc.) often overshadows many federally managed species. Fishery management decisions are made through the amendment process; amendments are developed to address a specific problem and most often address a single or limited number of species. To use data on fishing-dependent businesses, commercial or recreational, it would be necessary to isolate the relative impact to the business from a particular management action for a single or limited number of species. This would require the business owner to provide data that are not currently available, and which some business owners may consider confidential.

Returning to the list of existing socio-economic datasets, an example can help illustrate the application of available socio-economic data, and some issues arising from unavailable data. The accumulated landings system includes information on commercial landings, vessel crew size, and other effort variables for the commercial sector, which has reporting requirements. Commercial landings data are available at the community level which enables a regionally focused analysis as required by National Standard 8. With community-level commercial landings information, the relative importance of a particular species among other landed species can be assessed for a given community (local quotient). With these data, the communities with the greatest landings for a given species (regional quotient) can also be determined. Further, this analysis can examine change in the engagement and reliance of communities on different stocks over time.

On the other hand, landings data by community are not available for the recreational sector; landings and effort data are only available at the state level. Staff social scientists have used the distribution of recreational for-hire permits and private vessel registrations by community, compared with commercial communities with significant landings of a given species, as a proxy to identify recreational communities which may be significantly involved in fishing for that species. Given available data, the analysis identifies those communities which are likely to be more reliant on recreational fishing than other communities. However, the analysis cannot specify recreational communities' involvement with a specific species, but rather, with fishing in general which may include inshore, state managed species. Further-

more, the assumption that communities with abundant commercial landings for a given species correspond with abundant recreational landings of the same species, may or may not be true.

In addition to recreational landings at the community level, other socio-economic data are needed to improve required analyses. Executive Order 128989 (environmental justice) requires consideration of any disproportionate impacts of proposed regulations on minority and low-income populations. However, information on race, ethnicity, and income status for groups at the different participation levels (captains, crew, employees of fish houses, and other fishing related commercial and recreational businesses) is not available. In the absence of these data, the environmental justice analysis has used Census Bureau data, which provides proportions of the population that are minorities or living in poverty, at the county level. However, the overlap between identification of these populations and involvement in fisheries is unknown. Collecting demographic information on commercial and for-hire captains and crew, and those employed in fishery-dependent businesses is a critical socio-cultural data need. Collection of this information should include additional demographic variables (education, household size, occupational skills) and be updated regularly.

Additional data needs include ethnographic community profiles of fishing communities to assist in determining fishery reliance and dependence. Collecting community level data requires on the ground fieldwork and regular updates to assess change and impacts over time. This requires in-depth, ethnographic study of the fishing sectors and sub-groups within the sectors, including different participation roles (for-hire crew and passengers) and fishing preferences (offshore and inshore fishermen). Other important information could be provided through studies addressing occupational motivation and satisfaction; attitudes and perceptions concerning management; constituent views of their personal future of fishing; psycho-social wellbeing; and cultural traditions related to fishing (identity and meaning).

To summarize, we use several socio-economic datasets, although the available data is often inadequate to assess the impacts on communities from a specific management decision. Should additional funds be allocated to NMFS to address these socio-economic data needs, better coordination among agencies (NMFS Southeast Fisheries Science Center, NMFS Southeast Regional Office, Council staff, and State marine divisions) would be important for identifying and prioritizing new socio-economic data collection initiatives.

Question 2. Do you believe that we have a problem with the Councils when it comes to being able or willing to seriously examine, on a regular basis, allocations in mixed-use fisheries?

Answer. Difficulties in the regular evaluation and adjustments to existing allocation of fisheries resources between the commercial and recreational sectors mainly stem from the inherently challenging nature of resource apportionment between competing user groups. Differing objectives and fishing behavior between the commercial and recreational sectors have resulted in a deep polarization on the issue of reallocation. The Council has been discussing and considering the allocation of several reef fish species, including red snapper, gag, and red grouper, at numerous Council meetings since 2006. In addition, the Council has requested economic analyses from the South East Fisheries Science Center (SEFSC) to support its allocation discussions. Analyses provided by the SEFSC have been reviewed routinely by the Council's Socioeconomic Scientific and Statistical Committee. In early 2009, the Council adopted an allocation policy which provides principles, guidelines, and suggested methods for allocating fisheries resources between or within sectors. In addition, proposed reallocations must be consistent with the provisions of the Magnuson Stevens Act, including the relevant National Standards. Most recently, the Council has begun a review of the king mackerel allocation.

Reef Fish Amendment 28, considers reallocating the red snapper quota between the recreational and commercial sectors. Since its initiation, the scope of the amendment has been modified to consider reallocation decisions for several other reef fish species and the division of the recreational quota into private angler and for-hire sectors (sector separation). Most recently, the Council decided to move forward with sector separation in a separate document, and Reef Fish Amendment 28 now focuses on reallocating the red snapper quota between the recreational and commercial sectors. The Council reviewed the amendment at its February 2014 meeting, selected a preferred alternative, and added an additional alternative for analysis. Public hearings on Reef Fish Amendment 28 will be held around the Gulf in March. The Council expects to take final action on the document at the end of May 2014.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARCO RUBIO TO
BEN C. HARTIG

Question 1. 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. Most of the stocks managed by the South Atlantic Council, and the majority of those assessed to-date, are long lived and therefore rebuilding times are generally much longer than 10 years. As a result, few rebuilding plans are limited by the 10-year provision. Therefore, the South Atlantic Council's concerns with the 10-year provision are the lack of consistency it creates across stocks of differing life history and the needless complexity it adds to estimating rebuilding time. The Council strongly supports including latitude to deal with rebuilding, applying a simple and consistent approach for all rebuilding plans, and applying an approach that treats all stocks equally, regardless of life history characteristics.

The Council recommends that the maximum rebuilding time for all stocks be specified as the time to rebuild at $F=0 + 1$ mean generation. This simpler approach incorporates the criteria currently in place and applied for many stocks, while removing the complexity of the additional caveats necessary with the 10-year requirement. It also avoids creating different classes of stocks, with regard to rebuilding requirements, based on life history traits. Finally, this approach removes the expectation that stocks will rebuild under the theoretical (but impossible) conditions of a complete $F=0$ moratorium.

The 10-year provision fails to make sense on both extremes of fish life histories, the short-lived and the long-lived. Long-lived fish usually show low productivity and considerable lags between creating problems (overfishing) and identifying them (stock assessment) due to their tendency to build up large amounts of biomass. As a result, few assessments of long-lived fish indicate possible rebuilding in 10 years. The 10-year requirement becomes nonsensical due to the much larger scale of population dynamics for such stocks. Short-lived fish are, not surprisingly, quite the opposite. Their populations can change dramatically over just a few years, sometimes on a scale that is shorter than the typical interval between assessments. Ten years may represent several generations for such stocks, so allowing 10 years to rebuild can require very little in the way of conservative management.

The 10-year provision, as currently implemented, does not treat all stocks equally, and particular stock circumstances can lead to illogical outcomes. An example easily illustrates the logical inconsistency. Consider a single stock, overfished with declining abundance, which is being assessed for the first time. Since it is a hypothetical example of a single stock with declining abundance, the ability of the stock to rebuild in more or less than 10 years is determined by when the overfishing is identified. An assessment done this year finds that the stock can rebuild in 9.5 years under $F=0$, forcing the most stringent management possible. If the assessment were instead done next year, on the same stock, with the same overfished status and the same trajectory of declining abundance, simple passing of time dictates that biomass will be lower and status relative to biomass will be worse, *i.e.*, the stock is found to be "more overfished" by this assessment because it occurs later. This assessment finds that the slightly lower stock biomass cannot be rebuilt in 10 years at $F=0$, it will take 11 years, allowing the rebuilding plan to be extended to $F=0 + 1$ generation. Regardless of the generation time, this is a more liberal outcome than before. The net result is that less stringent management can be required when overfishing is identified at a lower biomass than is required if overfishing is identified at higher biomass. It is nonsensical to require a moratorium when a stock needs 9.5 years to rebuild but not require it if the stock needs 10.5 years to rebuild.

However, the biggest risk to fisheries posed by the arbitrary 10 year requirement arises when stocks actually can just achieve rebuilding within the 10 year period, thereby requiring that a Council implement rebuilding through an $F=0$ moratorium. This is a particular concern to the South Atlantic Council. One reason is due to the many long-lived species managed, because such a circumstance is much more likely to occur for long-lived stocks than short lived stocks. Another reason is that the South Atlantic manages a mixed-stock complex in the Snapper Grouper FMP, and the impacts of the moratorium assumed in the $F=0$ calculations will fall upon many species in a mixed species fishery, not just the one overfished species that is impacted in a largely directed, single species fishery. In other words, the moratorium on Atlantic Coastal striped bass did not remove opportunities to fish for bluefish, flounder, weakfish or croaker. However, a considered moratorium on South Atlantic red snapper threatened to end fishing for any of the 60 snapper grouper stocks from Cape Canaveral, Florida to Cape Hatteras, North Carolina. Under the simpler and

consistent approach proposed by the South Atlantic Council, rebuilding requirements will never demand a moratorium because every stock, regardless of its status at time of assessment or life history characteristics, will be allowed some time to rebuild in excess of the theoretical moratorium calculation.

Another problematic aspect of the 10 year rebuilding timelines that was not anticipated involves the negative economic and social affects. Imposing faster rebuilding timelines, especially on longer-lived species, can have large negative short-term effects. While a rebuilt stock potentially will result in greater positive long-term affects, the severity of the negative short-term affects is often overlooked. Many commercial and recreational fishing businesses are severely impacted because of the management measures that must be imposed to meet the rebuilding timelines. Many businesses cease to operate and are not around in order to enjoy the benefits of a rebuilt stock.

In addition to these potential negative long-term effects on fishing businesses, the relationship between the Council and the stakeholders may also be compromised. The public's trust in the process is challenged when commercial and for-hire businesses and recreational fishermen have restricted or no access to the resource for a period of time, particularly when what fishermen see on the water is inconsistent with results of assessment models. In the long term, stakeholders may start to feel that their input has little value, and their important involvement and faith in the process declines.

Question 2. Could you please describe what sort of socio-economic data your councils look at when considering new fishery management decisions? Do you get data specifically addressing recreational fishing and sportfishing-dependent businesses? Do you think NMFS should do a better job of providing such information to the Councils?

Answer. The primary source of commercial economic data considered by the Council comes from the logbook economic add-on survey. While these data are helpful there are two main drawbacks. First is that these data are collected monthly, but only on those trips that occurred in the EEZ. The logbook fails to collect data from trips where the Council species come from state-managed waters, creating gaps of missing data. The second issue is that the logbook landings data associated with the economic information contained in the surveys usually does not match the data that are used to measure the biological effects which come from a different data source. The logbook economic surveys include data on trip costs and the value of the landings, etc.

The primary source of data for recreational economic analyses comes from many sources. Very little economic information is collected as a part of the MRIP program, or from its predecessor, MRFSS. Data used to estimate values of consumer surplus or net operating revenue (NOR), if they are available at all, come from independent research and typically can only directly be applied to a portion of the area where the species are caught, or just a segment of the fishery (such as the headboat or charterboat industry, but not bait/tackle shops). The Council does not receive data specifically addressing recreational fishing and sportfishing-dependent businesses except in the rare occasions when such data are published in peer reviewed journal articles. Industry generated surveys may have built in data collection or analysis biases and, therefore are not typically referenced.

It certainly would be helpful if NMFS were able to collect unbiased information on all the allied businesses that are impacted by fisheries management, both commercial and recreational. Commercial fisheries management impact fish houses, restaurants, gear suppliers, etc. Recreational fisheries management decisions impact for-hire operations, bait/tackle shops, the coastal tourist industry and so on.

For social data on the commercial sector, the primary source is landings and logbook information. The data are analyzed at the community level to provide expected effects of potential management decisions.

Currently the southeast region does not have recreational data for a comparable analysis of potential effects on the recreational sector, with the exception of some headboat landings and for-hire permit information. However, social effects analysis also includes social indicators,

which provides information about both commercial and recreational engagement and dependence on a certain stock for each community to better understand how regulations may affect a local community and economy.

Analysis of social effects is also incorporated into the cumulative effects analysis to demonstrate the 'larger picture', which includes multi-fishery participation, a defining characteristic of the southeast region. By looking at how fishermen switch target fisheries depending on economic and environmental factors is crucial to understanding the broader effects of potential regulations on one species, because

southeast fishermen commonly participate in several fisheries throughout the year in both the recreational and commercial sector.

The most significant challenge for non-economic social data collection and effects analysis is the limitation on staff time and resources. With only four non-economist social scientists working on social effects analysis for amendments in both the Gulf of Mexico and South Atlantic regions, there is little time for additional projects to expand social data collection about important recreational and commercial communities.

Even with the lack of sufficient social and economic data the Council does make every effort to consider the economic and social data that are available in making management decisions. In all Fishery Management Plans, Amendments or other actions to be submitted to the Secretary of Commerce there is an Economics Effects section and a Social Effects section for each management action being considered. Within these sections socioeconomic impacts of the specific action are analyzed.

Question 3. Do you believe that we have a problem with the Councils when it comes to being able or willing to seriously examine, on a regular basis, allocations in mixed-use fisheries?

Answer. No, our Council doesn't have a problem with seriously considering reallocation when there is adequate justification and basis for doing so. But it's not an easy process; because when allocations are changed there will always be winners and losers.

I can't speak for the other Councils specifically, however, I suspect they have encountered the some of the same problems we have when considering modifying or changing allocations. When allocations between the various user groups were first established, the allocations were based largely on historical harvest of the fishery resource. Generally, the Council looked at the average commercial and recreational landings of a particular species over a period of time (series of years). Whatever percentage of harvest each group achieved over the agreed to historical time-frame was then established as their allocation.

We are currently dealing with 51 separate allocations for the snapper grouper complex species alone. These allocations vary from primarily commercial species such as golden tilefish, where the commercial fishery gets 93 percent of the allocation, to primarily recreational species such as mutton snapper where the recreational fishery receives 83 percent of the allocation. For other species the allocations are more evenly divided (*e.g.*, black sea bass 43 percent commercial and 57 percent recreational, gag grouper 51 percent commercial and 49 percent recreational).

There was considerable controversy when the initial allocations were established. In many instances the time series of years used in determining each group's historical catch made a big difference in their allocation. Understandably the Council is reluctant to go through that controversy (and associated pain) again without good reason. However, I believe our Council is willing to seriously examine allocations when there is good justification. We have a history of addressing changes in allocations over time. Spanish mackerel is a good example. In 1987 when the initial allocation was established it was 76 percent commercial and 24 percent recreational (based on historical landings). In 1989 it was determined that Spanish mackerel were overfished and the quota (now referred to as Annual Catch Limit or ACL) was lowered. At the same time since the commercial harvest was high and the recreational harvest was low, the allocation was changed to 50 percent commercial and 50 percent recreational. In 1998 the allocation was changed again to 55 percent commercial and 45 percent recreational, as the Spanish mackerel stock was rebuilt and the recreational sector was not harvesting it's allocation. Another recent example of where the Council has addressed reallocation is wreckfish. Wreckfish are a deepwater species that occur far offshore. The fishery was initially developed by the commercial industry and managed under an ITQ program, with the allocation being 100 percent commercial. More recently a deep drop charter fishery has developed and recreational interest in harvesting wreckfish has grown. In response the Council amended the Snapper Grouper FMP in 2013 to change the wreckfish allocation to 95 percent commercial and 5 percent recreational, which now allows for recreational harvest of wreckfish.

Future shifts in allocation for snapper grouper complex species will be considered as part of the Council's long-term "vision" for managing the snapper grouper fishery into the future, which is currently in progress.

Question 4. Would you please elaborate on the Atlantic Coastal Cooperative Statistics Program? How does it work and why hasn't it yet been implemented in the southeast?

Answer. The Atlantic Coastal Cooperative Statistics Program or ACCSP is a partnership between the Atlantic states, Potomac River Fisheries Commission, District of Columbia Fisheries and Wildlife Division, Atlantic States Marine Fisheries Commission, 3-East Coast Councils, U.S. Fish and Wildlife Service, and the National Marine Fisheries Service. ACCSP (www.accsp.org) is a cooperative state-federal program that designs, implements, and conducts marine fisheries statistics data collection programs and integrates those data into a single data management system that will meet the needs of fishery managers, scientists, and fishermen. In 1995, representatives from 23 coastal resource agencies along the Atlantic coast signed a Memorandum of Understanding to become partners in the ACCSP.

The Atlantic Coastal Cooperative Statistics Program (ACCSP) Strategic Plan for 2002–2006 outlined the Program’s overall goals and strategies for implementation of its standards for data collection and management for commercial, for-hire, and recreational fisheries. Upon approval of the Strategic Plan, the ACCSP Coordinating Council also recognized the need for a more specific plan to address partner status and more detailed tasks, given that needs are projected to exceed resources. The ACCSP 2004–2008 Implementation Plan (the Plan) outlined actions the ACCSP partners and program staff must take to implement a coast-wide program over the next five years (2004–2008).

The program partners are now implementing the Program’s standards within their respective areas. The Atlantic Coast Fisheries Data Collection Standards document, available on the website, includes details on the Program’s standards, policies, and procedures. The latest version of this document and its accompanying appendices were approved May 2012.

One of the primary goals of ACCSP was that of transparency. There was and still is a great deal of concern on the part of fishermen and other stakeholders about the data being used. To address this, the partners had a common goal of using data available from ACCSP for fishery management (landings, tracking quotas, bycatch, etc.). In this way, a fisherman or other member of the public could reproduce the data being used by a Council, NMFS, or other partner to verify that the correct data were being used. The Southeast Fisheries Science Center and Southeast Regional Office have not implemented this system. The following points outline issues that continue today:

1. *Lack of Transparency*—while data from the ACCSP program are compiled in the southeast, these data are not used directly for analyses or quota tracking. This makes it impossible for a fisherman or other member of the public to reproduce the data being used by visiting the ACCSP website. This results in the SAFMC using proprietary NMFS data, not data from the ACCSP website, which reduces transparency.
2. *Separate data systems*—the use of the separate ACCSP and NMFS data systems in the southeast result in a number of errors (ACCSP and NMFS data often differ) and the NMFS data cannot be verified by anyone outside of the NMFS Southeast program. In addition, there is an ongoing cost to maintaining these duplicative datasets.
3. *Commercial quota monitoring system*—rather than expand the existing ACCSP Quota Monitoring System used from North Carolina northwards and used by the Northeast Fisheries Science Center, the Southeast Fisheries Science Center decided to contract for a new, stand-alone system. The costs to extend the ACCSP program would have been minimal and it would have been ready when the South Atlantic Council moved to ACLs as required by the last revision to the Magnuson-Stevens Act. The contracted system is just now becoming effective and once the mandatory dealer reporting is implemented, the accuracy should improve. The extensive delay and expenditure of limited funds was unnecessary.
4. *Tracking recreational ACLs*—the Southeast Fisheries Science Center uses a different method of expanding for weight and numbers than is done in the rest of the United States. This methodology results in delays and errors in addition to the length of time required for MRIP to produce estimates of the recreational catch in numbers of fish.
5. *ACCSP Bycatch Program*—this program details the level of samples and observers necessary to produce reliable estimates of bycatch. This program was implemented in the northeast but not the southeast. NMFS has expressed concern about funding shortfalls to meet the minimum level of observer coverage. At the Council’s March 2013 meeting, where the Council was finalizing an amendment to implement the ACCSP Bycatch Program, NOAA GC offered to prepare a report on how the agency is meeting the Magnuson-Stevens Act by-

catch reporting requirements through existing programs at the September 2013 meeting. We are still waiting for this report.

In summary, we suggest an implementation meetings be held in the southeast with ACCSP, NMFS, State, and Council staff to determine how best to fully implement ACCSP, how to minimize duplicative/redundant data systems, and how to move to using data from the ACCSP website for FMP analyses to the greatest extent possible. These meetings should be held in 2014 with the goal of implementation being January 2015.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARCO RUBIO TO
JOHN D. BROWNLEE

Question 1. In your opinion, why do you think the Councils seem so unwilling or unable to consider reallocations of mixed-use fisheries?

Answer. Reallocating quotas between commercial and recreational users is understandably contentious, and can bring harsh reaction from the party being asked to relinquish some of its share. The Councils have too often taken the easy road and been hesitant to engage in reallocation discussions given the inevitable confrontations that will result, especially given the litany of other issues that face the Councils. However, there is too much at stake in terms of economic impacts and social benefits to continue to ignore reallocation. The Councils should be more willing to explore allocations, especially in instances where it is clear that the present allocation is not the highest and best use of fishery resources.

Question 2. Why do you think MSA has to date not dealt more directly with recreational fishing?

Answer. It's important to remember that the original Act sought to create the 200-mile Exclusive Economic Zone in U.S. waters, with the primary goal of expelling foreign commercial fishing fleets that had encroached upon our shores and displaced some of our domestic commercial fleet. MSA was, from the beginning, a tool to manage commercial activity. In a way, this makes sense when you consider that 98 percent of all finfish are harvested commercially, compared to only two percent harvested recreationally. However, from an economic standpoint, the two sectors have similar impacts to the nation, which makes a much stronger case for improved focus on recreational fisheries management. In addition, recreational fishing has experienced tremendous changes and growth since the original passage of MSA in terms of participation, technology and fishing practices. Congress and fishery managers alike have only recently begun to recognize these changes and view the recreational fishing industry as a vital and vibrant economic force.

Question 3. What have the consequences of this been for anglers and sport fishing businesses in the South Atlantic and Gulf?

Answer. The most pressing problems with MSA and how it relates to the recreational industry began with the 2006 reauthorization of the Act, during which the rigid Annual Catch Limits and Accountability Measures were adopted. Coupled with the lack of adequate science for many species of fish, this led to questionable or outright unjustifiable closures in many fisheries, as managers were forced by law to comply with these new managers. This created great hardship for many small businesses in the Gulf and South Atlantic.

Question 4. What kind of adjustments to MSA could bring the statute up-to-date if you will, given all of the information you have laid out in your testimony regarding the number of people who fish in saltwater and the amount of economic return that comes from this fishing?

Answer. Fishery managers need the ability to manage on a case-by-case basis, taking appropriate action where overfishing is clearly occurring, but also being given the latitude not to act in a strict and arbitrary manner where the data is less compelling, or in fact, non-existent. It simply makes sense to manage this way as opposed to the "one size fits all" approach we've endured since 2006. It's time to consider the economics of management actions in terms of how these myriad small businesses are affected by them as being equally important as doing the right thing biologically for the fish. Finally, it's time to recognize that our current management system is tailored towards commercial fishing. We need managers to consider alternative management approaches for recreational fisheries that meet the needs and goals of anglers.