Chairman Hastings and members of the Committee, thank you for the opportunity to testify before you today. My name is Eric Schwaab and I am the Assistant Administrator for Fisheries, within the Department of Commerce’s National Oceanic and Atmospheric Administration (NOAA). NOAA’s National Marine Fisheries Service (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. The Magnuson-Stevens Act also sets forth an innovative process of fishery management councils as a means to ensure local guidance of important science and management decisions.

The pieces of legislation before the Committee today would amend the Magnuson-Stevens Act in a number of ways. I will discuss the issues they seek to address in my testimony, which will focus on the process of ending overfishing, deadlines and progress in rebuilding depleted stocks, challenges of ensuring sustainable use, obtaining and using the best available science, implementing catch share systems, and particular challenges associated with recreational fisheries management. Together, these and other elements provide both great opportunity and challenge as we work together to ensure sustainable fisheries and the economic benefits they provide for current and future generations. While the Administration does not have formal positions on these bills, we have concerns with several provisions and briefly discuss our criteria for supporting proposed legislation.

**Transitioning to Sustainable Fisheries under the Magnuson-Stevens Act**

Since its initial passage in 1976, the Magnuson-Stevens Act has charted a groundbreaking course for sustainable fisheries. Reauthorized most recently in 2007, the Act mandates the use of science-based annual catch limits and accountability measures to end overfishing and rebuild
depleted stocks. The Act also provides for use of market-based fishery management through Limited Access Privilege Programs (or catch shares), focuses on collaborative research with the fishing industry, establishes standards for bycatch reduction, addresses the need to improve the science used to inform fisheries management, and seeks to end illegal fishing and bycatch problems around the globe so that foreign fishing fleets are held to the same standards as U.S. fleets.

At the core of many of our discussions today are fishing jobs. Fishing 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 fisheries management 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 of fishing communities across the country, the 230 most economically important fish stocks have collectively improved steadily over the last decade. Now, during this 35th anniversary year of the original passage of that bold legislation, and after decades of chronic overfishing in many fisheries, we are on track to end overfishing in all federally managed fisheries. Between 2000 and 2010, we ended overfishing on 36 stocks and rebuilt 23 stocks.

Collectively, we have learned that ending overfishing and rebuilding depleted fisheries brings significant economic and social benefit, but doing so takes time, persistence and sacrifice. The Magnuson-Stevens Act, as reauthorized in 2007, sets strict goals and timetables for ending overfishing, requires adherence to scientific information, and values precaution when uncertainty exists.

Let me be clear: Implementation of these measures has not been quick or easy for fishermen – commercial and recreational – nor has it been easy for the agency or the councils. Nonetheless, fishermen and regulators alike share the 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. Challenges remain, but as populations grow and catch limits increase, the benefits for the resource, the industries it supports, and the economy are beginning to be seen.

Ending Overfishing
One of the most significant new management provisions of the 2007 Magnuson-Stevens Act reauthorization was an explicit mandate to implement annual catch limits (ACLs) and accountability measures to end and prevent overfishing in federally managed fisheries. I am happy to say that we are making very good progress towards meeting that mandate. In 2010, the fishery management councils put in place annual catch limits and accountability measures for all stocks then experiencing overfishing. I am also happy to report that we are on track to have annual catch limits in place for all managed stocks for the next fishing year. As we complete assessments for these stocks in the coming years, we will be able to confirm that overfishing has ended. Until then, we will have science-based catch limits in place designed to end overfishing.
History has shown that effective management ends overfishing and results in significant economic benefit. Rebuilding all U.S. fish stocks would generate an additional $31 billion in sales impacts, support an additional 500,000 jobs and increase dockside revenues to fishermen by $2.2 billion, a more than 50 percent increase over current annual dockside revenues. A prime example of the benefits of rebuilding is seen in the New England sea scallop fishery, where revenues increased five-fold as the fishery rebuilt, from $44 million in 1998 to $265 million in 2010, making New Bedford the largest port by value every year since 2000.

Many other stocks are expected to rebound as we end overfishing and execute rebuilding plans. For example, after the first year under new catch limits in the New England groundfish fishery, in 2011, improving stocks allowed catch limits for 12 of 20 stocks in the New England groundfish complex to increase, providing immediate benefit to fishermen and local fishing communities.

In addition, many of the Alaska groundfish fisheries, by far the largest in the country by volume, have long been managed under a system equivalent to annual catch limits. None of these stocks is overfished or subject to overfishing, and all are near or above the abundance levels that support the long term optimum yield from the fishery. By comparison, ACL implementation is very new for most other fisheries. Increases in catch rates in future years are yet to be realized for those fisheries just now starting to implement them.

These success stories are a product of strong leadership by the regional fishery management councils and investment by the Congress, the hard work of scientists and fishermen across the country to attain the data needed to effectively inform management decisions, and in many cases, short-term sacrifice on the part of commercial and recreational fishermen. We recognize this sacrifice and are working to provide the councils with the best scientific and economic information available upon which to base management decisions, to ensure that management actions are as precise and focused as possible.

NOAA’s investment in science allows us to set ACLs that end overfishing and are as precise and focused as possible. We have made significant progress in this respect but we can continue to make improvements.

**Catch Shares**

Catch share programs have been a much discussed aspect of recent fishery management efforts. Catch share programs allocate harvest privileges or quotas to individuals or defined groups of fishermen, and are often implemented in fisheries where overcapitalization and overfishing are challenges that need to be addressed. Rather than employing closures, restrictive seasons, restricting days at sea or other input controls, catch share systems focus on controlling catches. By shifting focus to outputs, catch share systems allow fishermen greater control over when and where they fish, reduce burdensome regulations, allow independent decisions that maximize dockside values for fishing businesses and unleash the creativity of fishermen to better address challenging issues like bycatch reduction.
Within a framework of scientifically established annual catch limits, catch share systems give more direct control of fishing activity back to fishermen, allowing fishermen to plan their fishing seasons and be more selective about when and how they catch their allocation. Because catch share programs focus on individual accountability and fishermen are allocated a share in a fishery, fishermen gain an economic incentive to catch their allocation at the least cost, when market values are most advantageous, and without exceeding their allocation; as a fish stock rebuilds, the holder’s share increases in value.

Catch share programs have been particularly valuable for fisheries where, due to rebuilding requirements, more restrictive catch limits have been set, or where bycatch concerns have constrained fishing activity. In these cases, the increased flexibility afforded fishermen has allowed them to operate more economically.

Catch share programs, which include a variety of approaches such as Limited Access Privilege Programs, authorized by the Magnuson-Stevens Act, have operated successfully in the United States since 1990. Currently, there are 15 different catch share programs in place, stretching from Alaska to Florida.

Catch share programs can bring a wide range of social, economic, and biological benefits to a fishery and communities.
- They have been shown to eliminate dangerous “race-to-fish” or “derby” conditions and improve safety for fishermen.
- Fisheries with these programs have experienced increased landings, reductions in bycatch, improved stability and increased season length.
- These conditions encourage product innovation, reduce costs, and result in higher profits for fishermen.
- Catch share programs also improve the quality and quantity of fishery data, which leads to reduced scientific uncertainty and potential for increased catch quotas.

The security and predictability that comes with catch share programs have the potential to help us get out in front of the boom and bust cycle we deal with in many fisheries. In the long-overfished Gulf of Mexico commercial red snapper fishery, quotas were regularly exceeded and fishing derby conditions were resulting in shorter and shorter seasons. Since 2007, when an individual fishing quota program was implemented, the commercial season length has been extended from an average of 88 days before the individual fishing quotas to year-round after program implementation. In combination with other favorable factors, the share price, which reflects the long-run expectations of economic returns, has more than doubled since program implementation, increasing from $6.74 in 2007 to $16.81 in 2010. Additionally, median ex-vessel prices for red snapper in 2010 increased 25% over 2006 prices. The stability provided by catch share programs gives fishermen the opportunity for improved business planning. Knowing they will have a certain allocation each and every year allows them to make investment decisions to improve their business and increase profits.

The 2011 implementation of the West Coast Groundfish Trawl Catch Share Program was a strong and effective move to preserve the economic potential of the fishery. Preliminary results
indicate a strong performance by the fishery this year. After a slow start early in the year, landings have steadily increased, to the point that both landings and revenue during June of this year were higher than 2010 and even higher than the historical average for June. Encouragingly, revenues per vessel are also up substantially. These positive economic trends for fishermen are even more remarkable because they are accompanied by a vast reduction of discarded catch. On average there was a 28 percent decrease in discards across species categories in the program between 2009 and 2011. That's an extremely positive result for fishery management and conservation.

A fisherman in Morro Bay, who fishes under the West Coast Groundfish Trawl Program, is part of an experimental program, in which he's fishing hook-and-line instead of trawling. Trawling, he used to get about $1.80 a pound for black cod. After he made the switch to hook-and-line, he’s getting $5 a pound. He’s not catching as many fish, but chefs are clamoring for his superior product. This strategy allows black cod populations to recover because there are not as many fish taken, yet gives fishermen a better return for their effort. He is now fishing smarter, not harder and is optimistic about his future.

However, while catch shares have been a successful tool in many instances, they are not appropriate for every fishery, and we need to remain mindful of potential drawbacks these programs can have. Improperly designed catch share programs can result in consolidation of the harvesting sector because some fishermen holding shares will decide to lease or sell their privileges to someone else. There have also been concerns about how catch share programs might affect recreational fisheries, contribute to job losses on shore, or threaten small boat communities as shares are transferred among vessels and ports. All of these concerns can be resolved by proper catch share design at the local level by fishery management councils. The NOAA Catch Share Policy, effective November 4, 2010, provides guidance and direction to the councils as they implement these programs and NMFS continues to engage with the councils and stakeholders to address issues that have been raised.

**Recreational Benefits**

Recreational fishermen are a large and important constituency for NOAA. Recreational fishing is an important national pastime and a significant contributor to the U.S. economy, generating $50 billion in sales impacts, contributing $23 billion to the Gross National Product, and supporting 326,000 jobs in 2010.¹ Recreational fisheries face unique challenges, as in many cases success is measured less by pounds landed and more by quality fishing opportunity and time on the water with family and friends. For this reason, new approaches are necessary to ensure a satisfying recreational fishing experience and conservation mandates. One new approach currently underway is a proactive collaboration between NMFS and the angling community to improve survival of recreationally released fish and reduce the “footprint” of recreational fisheries. Success of the NMFS
To this end, NOAA embarked on a focused effort in September 2009, referred to as the Recreational Fisheries Engagement Initiative, to establish a strong and trusting partnership with the recreational fishing community. We released a national plan of action to accomplish this goal in October 2010, and have aggressively pursued its implementation. Soon, NMFS will release regional recreational fisheries action plans which will mark the first time NMFS has had both national and regional plans in place to identify and address the concerns and priorities of our recreational fishing constituents. NMFS has also undertaken numerous projects to improve data collection and estimation methodologies including:

- Implementation of the National Saltwater Angler registry to increase efficiency in developing recreational fishing effort estimates (January 2010);
- Upcoming implementation of an improved methodology to provide more accurate recreational catch estimates (early 2012);
- Upcoming implementation of new survey designs for collection of recreational catch and effort data (pilot testing in 2012; operational deployment for Atlantic and Gulf coasts January 2013);
- Development and testing of improved survey designs for the Pacific RecFIN surveys (pilot tests of improved designs currently underway in Washington and Oregon, and being designed for California pilot testing in 2012);
- Implementation of multiple pilot recreational data collection projects, such as the Gulf of Mexico For-hire Logbook, to streamline and improve data collection (pilot project completed in 2011; final project report and recommendations for implementation due in early 2012);
- Implementation of the 2011 National Angler Expenditure Survey to provide better and updated economic data on recreational fishing (March 2011); and
- A stakeholder review to identify gaps in NMFS’ recreational socio-economic data and data collection systems (April 2011), an internal workshop to address data and modeling needs (July 2011) and a follow-up stakeholder workshop to discuss results of the needs assessment (early 2012).

NMFS recognizes the important role that recreational fishing plays in our economy, and we are committed to working with the recreational fishing community to ensure that we are protecting the resources they care so deeply about and that we are fostering a substantial economic driver of our coastal communities. Again, this requires a delicate balancing act between preventing overfishing and maximizing recreational fishing opportunities.

**Rebuilding Deadlines**

When fishery stocks are determined to be overfished, the Magnuson-Stevens Act requires that those stocks be rebuilt as soon as possible but in no case longer than 10 years unless the biology of the stock, other environmental conditions, or international obligations dictate otherwise. Nationwide, 45 stocks are subject to a rebuilding plan with an estimated timeline to rebuild, of those stocks 56% have rebuilding timeframes longer than 10 years due to the existing flexibility in the law. For example, the rebuilding timeframe for Georges Bank cod is 22 years, Gulf of Mexico red snapper is 32 years, Pacific Cowcod is 72 years, and Atlantic dusky shark is
100-400 years. Rebuilding timelines vary based on the life history of the animal. For example, sharks are very long-lived and do not reach sexual maturity for years.

Our experience is that when overfishing has been ended in a rebuilding program, the stocks have rebuilt well and the rebuilding timeframes have not been a problem. However, rebuilding deadlines set by the Magnuson-Stevens Act are ultimately a policy decision. It is a matter of how long you want to wait for rebuilding (and associated economic benefits) to occur and what short term sacrifices you are willing to make to get there. Congress ultimately made a policy decision when determining the 10-year rebuilding deadlines in the Magnuson-Stevens Act but they also added flexibility to deal with certain issues as described above. I understand the concerns about the rebuilding deadlines and at the request of some Members of Congress, NOAA committed funding for a National Academy of Sciences review that will provide much needed scientific evaluation of the rebuilding timeframe. This study, which will be completed in early 2013, will evaluate current methodology relative to a spectrum of stock assessment issues, review the success of stock rebuilding plans both in the United States and abroad, and identify any systemic knowledge gaps that offer impediments to the implementation of stock rebuilding programs. The answers to these questions will help NOAA continue to provide the best scientific information available to fisheries managers to meet the mandate of sustainably managed U.S. fisheries.

Science
Without high quality fishery science, we cannot be confident that 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 an investment in information about fish stocks, their fisheries and their ecosystems. The United States has a clear legislative mandate to achieve sustainable fisheries, based on a strong regulatory structure in association with the regional fishery management councils. NMFS is committed to generating the best fishery science to implement this program. We are international leaders in fishery science, at the forefront of rebuilding overfished stocks and preventing overfishing, efforts that are beginning to pay off in many coastal communities. Today, we know more about our fish stocks than ever before, and it is vital that our science not regress, as this would inevitably lead to declines in our stocks and a loss in the economic and social values they provide.

While uncertainty is inherent in all fish stock assessments, investments in increased and improved assessment data reduce uncertainty, thus allowing a larger optimum yield without increasing the chance of overfishing. This in turn allows for greater fishing opportunities and improved economic benefits. Conversely, reduced investment in assessments, including reduced support for the NOAA fleet, which provides the platforms for collecting vital fisheries-independent data, will lead to either increased uncertainty and lower catch limits or greater risk of overfishing.

From 2005 to 2010, NMFS had the data and capacity to assess an average of 95 stocks each year. With this level of assessment activity, NMFS is able to provide regular assessments for the most important stocks tracked under the Fish Stock Sustainability Index. The Index tracks progress towards ending overfishing and represents a combination of stock status, fishing rates, and our
level of scientific understanding of a group of important fish stocks. Of the 500 plus federally managed stocks, 230 have been identified for inclusion in the Index, constituting over 90 percent of U.S. commercial landings. NMFS has been able to increase the number of Index stocks with adequate assessments from 119 in 2005 to 132 in 2010. The overall index score, which measures our progress, has shown a 63 percent improvement since 2000. Continued progress on the quality and frequency of stock assessments gives us more confidence in the ACLs we are implementing.

Investment in science and management results in sustainable fisheries. That is why NMFS has always focused on getting the most data, and the highest priority and quality data, by fully utilizing the funding Congress has provided. With sustained Congressional support, we can continue to make substantial progress. Conversely, reducing commitments to science, or retreating from the mandates of the Magnuson-Stevens Act, will hurt our fisheries and reduce local economic benefits.

**General Views on Proposed Legislation**

NOAA supports the collaborative and transparent process embodied in the regional fishery management councils, as authorized in the Magnuson-Stevens Act. Generally speaking, we would oppose legislation that limits the options available for fishermen to sustainably harvest their respective fisheries. NOAA believes that catch shares, in particular, are a viable option for many fisheries and regional fishery councils should be given the freedom to recommend this option to the Secretary for approval.

It is critical that we maintain progress towards meeting the mandate of the Magnuson-Stevens Act to end overfishing and, as necessary, rebuild stocks. ACLs are an effective tool in improving the sustainability of fisheries around the Nation, and NOAA has concerns with legislation that would create exemptions or otherwise weaken provisions regarding ACLs. Uncertainty in the stock assessments upon which ACLs are based should not be used as a basis for exempting fisheries from ACLs.

In an increasingly constrained fiscal environment, legislation should not mandate duplicative or otherwise unnecessary actions. Additional stages of review for certain types of fisheries data, or repeating data collection and stock assessment efforts when there are already sound peer reviewed processes in place are examples of actions that will divert resources to a select few fisheries at the expense of others with little additional benefit. Moreover, legislation should be cost-effective and consistent with the President’s Budget. NMFS welcomes the opportunity to work closely with Congress, the regional fishery management councils, and the recreational and commercial fishing industries, to use the best available science to seek opportunities for efficiency and improved management in order to end overfishing and rebuild stocks.

**Closing**

The FY 2012 appropriation for NOAA provided NMFS $794.2 million for Operations, Research, and Facilities (ORF), which is $51.0 million (6.0%) below the FY 2011 Spend Plan, and $110.3 million (12%) below the FY 2010 Omnibus. In addition, significant cuts in other parts of the bill may impact funding for important activities, such as days at sea for NOAA vessels dedicated to
These significant reductions, necessitated by the Nation’s current economic situation, will amplify the challenges facing NMFS, the regional fishery management councils, and the commercial and recreational fishing industry.

NOAA will continue to work with Congress and stakeholders to ensure our highest priorities are supported as we continue the transition to sustainable fisheries during these challenging fiscal times. We will continue to invest in our efforts to provide high quality scientific information and stock assessments, innovative and timely management systems, and fair and effective enforcement programs to ensure our marine resources are effectively managed to support coastal communities and the Nation.

Thank you again for the opportunity to testify before you today. I am happy to answer any questions you may have.
Appendix: List of Fisheries-related Hearings in 2011

The following is a list of congressional hearings at which NOAA testified in 2011 that focused on issues related to fisheries management and the Magnuson-Stevens Act. The content of NOAA’s testimonies for these hearings may be useful to the Committee as it continues to consider the proposed bills that are the topic of today’s hearing. NOAA would be happy to provide copies of these testimonies for the record at the Committee’s request.

- **March 8, 2011** – “The Implementation of the Magnuson-Stevens Fishery Conservation and Management Act” before the U.S. Senate Committee on Commerce, Science, and Transportation, Subcommittee on Oceans, Atmosphere, Fisheries and the Coast Guard
- **June 20, 2011** – “How is NOAA Managing Funds to Protect the Domestic Fishing Industry?” before the U.S. Senate Committee on Homeland Security and Intergovernmental Affairs, Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security
- **July 26, 2011** – “NOAA’s Fishery Science: Is the Lack of Basic Science Costing Jobs?” before the U.S. House of Representatives Committee on Natural Resources, Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs
- **October 3, 2011** – “Hearing to Review Massachusetts Fishery Management Plans” before the U.S. Senate Committee on Commerce, Science, and Transportation