

**SPENDING FOR NOAA AND NMFS
AND THE PRESIDENT'S FISCAL
YEAR 2012 BUDGET REQUEST FOR
THESE AGENCIES**

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON FISHERIES, WILDLIFE,
OCEANS AND INSULAR AFFAIRS

OF THE

COMMITTEE ON NATURAL RESOURCES

U.S. HOUSE OF REPRESENTATIVES

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**OVERSIGHT HEARING ON “SPENDING FOR
THE NATIONAL OCEANIC AND ATMOS-
PHERIC ADMINISTRATION AND THE
NATIONAL MARINE FISHERIES SERVICE,
AND THE PRESIDENT’S FISCAL YEAR 2012
BUDGET REQUEST FOR THESE AGENCIES.”**

**Thursday, March 31, 2011
U.S. House of Representatives
Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs
Committee on Natural Resources
Washington, D.C.**

The Subcommittee met, pursuant to call, at 2:02 p.m. in Room 1334, Longworth House Office Building, John C. Fleming, [Chairman of the Subcommittee] presiding.

Present: Representatives Fleming, Hastings, Young, Duncan, Wittman, Southerland, Harris, Runyan, Markey, Pallone, Bordallo, Sablan, Pierluisi, and Hanabusa.

**STATEMENT OF HON. JOHN FLEMING, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF LOUISIANA**

Dr. FLEMING. The Subcommittee will come to order. The Chairman notes the presence of a quorum, which under Committee Rule 3[e] is two Members. The Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs is meeting today to hear testimony on the President’s Fiscal Year 2012 budget request for the National Oceanic and Atmospheric Administration, and the National Marine Fisheries Service.

Under Committee Rule 4[f], opening statements are limited to the Chairman and the Ranking Member of the Subcommittee so that we can hear from our witnesses more quickly.

However, I will recognize the Chairman and Ranking Member if he is here, and there he is, for any statement that he may have following the statement of the Subcommittee Ranking Member.

I will also ask for unanimous consent to include any other Members’ opening statements in the hearing record if submitted to the Clerk by close of business today. Hearing no objections, so ordered.

[The prepared statement of Chairman Fleming follows:]

**Statement by The Honorable John Fleming, Chairman,
Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs**

As I am sure you are aware, we are hearing from a lot of fishermen about reduced harvest levels and fishery closures. In many cases, fishermen are frustrated either because the data which is being used to close fisheries is old or because the reason for the closure is not being adequately explained. I am sympathetic to both concerns. And while this budget proposal does add some new funding for stock assessments, if new information from new stock surveys is not included, you will be using much of the same old data in the assessments.

Old data means your scientists and fishery managers include multiple layers of precaution when running their models. More precaution means lower harvest levels. Lower harvest levels mean fishery closures or restrictions which means less jobs

and more economic harm to coastal communities. No funding for new information means NOAA can continue to use old data, hiding behind the “best scientific information available” argument. This is not acceptable.

NOAA prides itself on being a scientific agency yet it continues to use old data when making management decisions—not just for fisheries management but also for Endangered Species Act decisions. You can imagine the frustration of fishermen whose livelihoods are threatened by an agency using ten-year old data at the same time the agency is cutting the ship time available to do stock surveys. You can imagine the frustration of fishermen who are told that recreational catch data is unavailable by an agency that wants to spend \$2 billion on satellite programs but cuts observer coverage. You can imagine the frustration of our Full Committee Chairman when NOAA closes a valuable fishery based on little or no reliable data on Steller sea lions and their feeding habits at the same time NOAA is not funding any research to get the necessary answers. And you need to understand my frustration of seeing an agency grow 41% since 2008 but not addressing these issues. That has to change.

While I understand that NOAA is more than a fisheries management agency, it often seems that NOAA is more interested in new technology than it is in getting basic information on how many fish are out there and available to fishermen. There is also a perception that the conservation aspects of NOAA’s missions overshadow the missions to utilize the fishery resources of this Nation. I’m afraid this budget request will not change this perception or the minds of those facing fishery closures and fishery restrictions.

Safe seafood is also a priority for our country, and certainly for the Gulf of Mexico. A recent nationwide survey by the Louisiana Seafood Promotion and Marketing Board found 70 percent of people are still concerned about eating Gulf seafood. For many this is troubling because Gulf seafood already undergoes some of the most intensive testing in the world—and test results that show Gulf seafood is safe to eat.

I, along with many others, am concerned that until the public has a better understanding of the federal government’s seafood safety work in the Gulf, consumer confidence will remain low, Americans will avoid healthful seafood, and the Gulf Coast economy will struggle to rebuild. I recently joined my colleagues in writing to the administration and strongly recommend that the Administration develop a robust, top-down approach to communicate to the American people that Gulf seafood is safe and healthy. I would urge you, consistent with your agency’s mission to “conserve and manage coastal and marine resources to meet our Nation’s economic, social and environmental needs” to be a part of the development of this approach and where appropriate, to work closely with the Gulf states and BP to effectively communicate your work and testing results on the safety of Gulf seafood to the American public.

Having said all of that, I encourage you today to address these challenges with the Subcommittee as you present the President’s FY 2012 budget for NOAA. I would also like to thank Eric Schwaab, Assistant Administrator for Fisheries, for being here to answer questions specific to the National Marine Fisheries Service portion of the NOAA budget.

Dr. FLEMING. I would also like to note that this is the first hearing that the Subcommittee has held since the appointment of our new Subcommittee Ranking Member, Mr. Sablan, and I would like to congratulate him on his appointment, and welcome, sir.

Mr. SABLAN. Thank you.

Dr. FLEMING. Just a note here about time. The latest update was that we are going to be having two votes at 2:30. So we are going to try to get opening statements out of the way at least, and then we can reconvene.

As I am sure that you are aware, we are hearing from a lot of fishermen about reduced harvest levels and fishery closures. In many cases, fishermen are frustrated either because of the data which is being used to close fisheries is old, or because the reason for the closure is not being adequately explained.

I am sympathetic to both concerns, and while the budget proposal does add some new funding for stock assessments, if new information from new stock surveys is not included, you will be using much of the same old data in the assessments.

Old data means that your scientists and fisher managers include multiple layers of precaution when running their models. More precaution means lower harvest levels. Lower harvest levels means fishery closures or restrictions, which means fewer jobs and more economic harm to coastal communities.

No funding for new information means NOAA can continue to use old data, hiding behind the “best scientific information available” argument. This is not acceptable. I know that Mr. Young has raised the issue of “best scientific information available” at many hearings in the past, and I suspect now that I have brought it up that he will have something to say on the issue.

NOAA prides itself on being a scientific agency, yet it continues to use old data when making management decisions—not just for fisheries management, but also for Endangered Species Act decisions.

You can imagine the frustration of fishermen whose livelihoods are threatened by an agency using 10-year-old data at the same time the agency is cutting the ship time available to do stock surveys.

You can imagine the frustration of fishermen who are told that recreational catch data is unavailable by an agency that wants to spend \$2 billion on satellite programs, but cuts observer coverage.

You can imagine the frustration of our Full Committee Chairman when NOAA closes a valuable fishery based on little or no reliable data on Stellar sea lions and their feeding habits at the same time that NOAA is not funding any research to get the necessary answers.

And you need to understand my frustration of seeing the agency grow 41 percent since 2008, but not addressing these issues. That has to change. While I understand that NOAA is more than a fisheries management agency, it often seems that NOAA is more interested in new technology than it is in getting basic information on how many fish are out there and available to fishermen.

There is also a perception that the conservation aspects of NOAA’s mission overshadow the missions to utilize the fishery resources of this nation. I am afraid that this budget request will not change this perception or the minds of those facing fishery closures and fishery restrictions.

Having said all of that, I encourage you today to address these challenges with the Subcommittee as you present the President’s Fiscal Year 2012 budget for NOAA. I would also like to thank Eric Schwaab, Assistant Administrator for Fisheries, for being here to answer questions specific to the National Marine Fisheries Service portion of the NOAA budget.

I will now recognize the Ranking Member for five minutes for any statement that he may have.

STATEMENT OF HON. GREGORIO SABLAN, A DELEGATE IN CONGRESS FROM THE COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

Mr. SABLAN. Thank you very much, Mr. Chairman, and good afternoon everyone. Mr. Chairman, I would like to ask for your indulgence to diverge for a moment from today’s agenda, because there is a matter that I want to bring to your attention.

Last December, Homeland Security Secretary Napolitano wrote to Natural Resources Chairman, Nick Rahall, Senators Bingaman and Akaka, and myself, saying that she expected to publish a transitional worker rule implementing Public Law 110-229 in the first quarter of 2011.

Today is the last day of the first quarter and the rule has not been published. Respectfully, I would like to request an oversight hearing on this and other issues regarding the transition to Federal control of immigration in the Northern Mariana Islands as soon as possible.

I will tell you that, without this, businesses are hurting. They cannot sign contracts without knowing whether their workers will be available. We have to end this uncertainty. Anything that you can do to place a hearing on the Subcommittee's schedule would be most appreciated.

Dr. FLEMING. Will the gentleman yield?

Mr. SABLON. Yes, of course, Mr. Chairman.

Dr. FLEMING. You and I have talked about the implementation of Public Law 110-229, the Consolidated Natural Resources Act, which applied Federal immigration laws to the Commonwealth of the Northern Mariana Islands.

The Department of Homeland Security has been remiss in meeting its deadlines to publish any of the implementing regulations. The lack of regulations has created uncertainty in the region and has had an adverse impact on job creation and the local economy.

It is my intent to consult with Chairman Hastings and see when we can have such a hearing. The Department of Homeland Security and other witnesses would be invited to testify on the implementation of the Act to allow the Subcommittee an opportunity to have a broad discussion on what I recognize as an important matter for your constituents.

Mr. SABLON. Thank you very much, Mr. Chairman. Mr. Chairman, both you and I come from districts where our constituents benefit from services that the National Oceanic and Atmospheric Administration provides.

During the *Deepwater Horizon* spill, and in the wake of Hurricane Katrina, the North Office of Response and Restoration was there on the front lines providing scientific information to aid in the response and recovery efforts in Louisiana and collecting data to understand the scope of the damage to fisheries and other natural resources in the Gulf of Mexico.

Just this month there were real time measurements and modern technologies developed by NOAA's Pacific Marine Environmental Laboratory, and installed NOAA tsunami warning centers that accurately predicted when the Japanese tsunami would hit the Northern Mariana Islands.

This allowed the people who I represent to get away from the danger on the shore, and in Hawaii, and all along the West Coast of our nation, and in the Territory of Guam, people were prepared because of NOAA's warning system.

So the United States was relatively unscathed by this massive natural disaster, and only a few American lives were lost. These are the kinds of public services that most of us do not think about until the day that we need them.

And when that day comes, when that unexpected emergency is suddenly upon us, then we are very glad indeed that our nation has made the investments and that we are prepared.

Now the Administration has requested \$5.5 billion for NOAA for Fiscal Year 2012. That is an increase of \$749.3 million from the enacted level for Fiscal Year 2010. In contrast, the majority's Continuing Resolution, H.R. 1, cuts almost \$400 million from the 2010 enacted level. So there is a significant divergence.

But we know that NOAA provides a range of products and services that private citizens and businesses need, not just in emergencies, but on a daily basis, and especially in coastal communities where people's livelihoods depend on the health of the oceans, whether for casting, knowing how to manage fisheries so that they will keep producing, and giving advanced warnings for natural disasters.

So we will have to continue to determine in a very difficult fiscal situation our country faces which of those services we cannot afford, and that we will have to get by without, and which of those services NOAA provides that are simply too important, and that we simply cannot afford to go without.

With that, I look forward to hearing from our witnesses today, and learning more about what America is getting for its money, and I thank you, Mr. Chairman.

[The prepared statement of Mr. Sablan follows:]

Statement of The Honorable Gregorio Kilili Camacho Sablan, Ranking Member, Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs

Mr. Chairman, you and I both come from districts where our constituents benefit from services that the National Oceanic and Atmospheric Administration provides. During the *Deepwater Horizon* oil spill and in the wake of Hurricane Katrina, NOAA's Office of Response and Restoration was there, on the front lines, providing scientific information to aid response and recovery efforts in Louisiana, and collecting data to understand the scope of the damage to fisheries and other natural resources in the Gulf of Mexico.

Just this month it was the real-time measurements and modeling technologies developed by NOAA's Pacific Marine Environmental Laboratory and installed at NOAA's Tsunami Warning Centers that accurately predicted when the Japanese tsunami would hit the Northern Mariana Islands. This allowed the people I represent to get away from the danger on the shore. And in Hawaii and all along the West Coast of our nation, people were prepared because of NOAA's warning system. So the United States was relatively unscathed by this massive natural disaster and only a few American lives were lost.

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So, we will have to determine—in the very difficult fiscal situation our country faces—which of those services we cannot afford and will have get by without, and which of those services NOAA provides that are simply too important and that we simply cannot afford to be without.

With that, I look forward to hearing from our witness today and learning more about what America is getting for its money.

Dr. FLEMING. I thank the gentleman. Next, I now recognize the Chairman of the Full Committee, Mr. Hastings, for any statement that he may have.

STATEMENT OF HON. DOC HASTINGS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. HASTINGS. Thank you very much, Mr. Chairman. I appreciate as always the courtesy that I am being shown here. This hearing is very important for my constituents in Central Washington, as well as for the American people nationwide.

As NOAA comes to testify in support of a sizable budget increase over current funding levels, many of the millions of people who live on the land and in coastal areas that NOAA regulates are struggling economically.

For the past 20 years, NOAA has expanded its management responsibilities over Endangered Species Act-listed salmon to include 28 separate populations, resulting in severe economic impacts to vast portions of Washington, Oregon, Idaho, and California.

These listings have resulted in policies that require Federal approval of literally every human activity involving water and salmon. Over the past decade, increased lawsuits against agriculture, irrigation, forestry, transportation, operators of clean hydropower-producing dams, and other developments, have taken a huge bite out of our Nation's economy.

These lawsuits have even blocked efforts to stop sea lions from eating more and more endangered salmon. Despite several recent years of record and near-record salmon runs, not one population of salmon has been removed from the ESA list.

NOAA has finalized only a handful of salmon recovery plans and NOAA has even suggested in a recent decision that more ESA-listed salmon species will be needed to feed another listed species under its jurisdiction, the orca whale.

President Obama in his State of the Union Address referred to the duplicative Federal endangered salmon management in oceans and rivers as an example of how the government needs to be more efficient and competent.

I agree that the Federal Government can and must be more efficient in these areas. Unfortunately, this latest NOAA budget request falls far short in my mind.

This budget request represents an increase of more than \$700 million over current funding levels, a nearly 16 percent increase, largely for expensive new satellite programs and to create a whole new bureaucracy, the NOAA Climate Service, including plans for a "customer engagement and education division."

And in exchange for that huge increase, NOAA seeks to wrap up law enforcement against fishermen in the midst of recent media reports that NOAA shredded documents and imposed unjustified fines, and shut down fisheries.

NOAA also seeks a \$37 million increase for a "national catch share program and, in the process, moving money out of a more productive cooperative research program. While I understand the need to fund existing catch share programs, I am concerned that the Administration seems intent on imposing catch shares in fisheries where they are not wanted.

I am concerned with the adequacy of NOAA's data collection activities. This budget request significantly cuts ship time for fishery research vessels and heightens concerns about whether NOAA will have reliable science to guide its fishery regulations.

This data concern is particularly apparent in the science used by the agency to regulate activities, like ocean-based fishing, that might affect species. Even though NOAA has spent more than \$150 million since 2001 for Steller sea lion research, significant questions remain unanswered.

This is especially true in the Western Aleutian Islands where NOAA-imposed restrictions could result in up to \$61 million in losses per year based on the actions of only three tagged animals. Such decisions made without adequate scientific information are simply unacceptable.

NOAA also increases new funds to implement the controversial Coastal and Marine Spatial Planning initiative and the National Ocean Council activities, which is constructed to lead to sweeping new regulations on coastal and inland waterways across the Nation.

I am troubled that these Executive Branch actions are moving forward without Congressional or statutory approval. In the coming months, I look forward to a robust oversight of NOAA's programs and activities to ensure that species, coastal areas, and American jobs, are protected for generations to come, and that NOAA's decisions are based on sound science and only move forward under proper statutory authority.

And with that, Mr. Chairman, thank you again. I yield back my time.

[The prepared statement of Chairman Hastings follows:]

**Statement of The Honorable Doc Hastings, a Representative
in Congress from the State of Washington**

This hearing is very important for my constituents in central Washington—as well as for Americans nationwide. As NOAA comes to testify in support of a sizable budget increase over current funding levels, many of the millions of people that live on the land and coastal areas NOAA regulates, are struggling economically.

For the past 20 years, NOAA has expanded its management responsibilities over Endangered Species Act-listed salmon to include 28 separate populations, resulting in severe economic impacts to vast portions of Washington, Oregon, Idaho and California.

These listings have resulted in policies that require federal approval of literally every human activity involving water and salmon. Over the past decade, increased lawsuits against agriculture, irrigation, forestry, transportation, operators of clean hydropower-producing dams, and other development, have taken a huge bite out of our nation's economy. These lawsuits have even blocked efforts to stop sea lions from eating more and more endangered salmon.

Despite several recent years of record and near-record salmon returns, not one population of salmon has been removed from the ESA list. NOAA has finalized only a handful of salmon recovery plans. NOAA has even suggested in a recent decision that more ESA-listed salmon species will be needed to feed another listed species under its jurisdiction—the orca whale.

President Obama, in his State of the Union address, referred to the duplicative federal endangered salmon management in the ocean and in rivers as an example of how the government needs to be more efficient and competent. I agree the federal government can and must be more efficient in these areas. Unfortunately, this latest NOAA budget request falls far short.

This budget request represents an increase of more than \$700 million over current funding levels—a 15.8% increase—largely for expensive new satellite programs and to create a whole new bureaucracy—the NOAA Climate Service, including plans for a “customer engagement and education division.”

In exchange for that huge increase, NOAA seeks to ramp up law enforcement against fishermen in the midst of recent media reports that NOAA officials shredded documents, imposed unjustified fines and shut down fisheries.

NOAA also seeks a \$37 million increase for a “national catch share program”—in the process, moving money out of a more productive cooperative research program. While I understand the need to fund existing catch share programs, I am concerned that the Administration seems intent on imposing catch shares in fisheries where they are not wanted.

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This data concern is particularly apparent in the science used by the agency to regulate activities—like ocean-based fishing—that might affect listed species.

Even though NOAA has spent more than \$150 million since 2001 for Steller sea lion research, significant questions remain unanswered. This is especially true in the western Aleutian Islands where NOAA-imposed restrictions could result in up to \$61 million in losses per year based on the actions of only three tagged animals. Such decisions made without adequate scientific information are unacceptable.

NOAA also seeks new funds to implement the controversial Coastal and Marine Spatial Planning initiative and National Ocean Council activities, which is constructed to lead to sweeping new regulations on coastal and inland waterways across the nation. I am troubled that these executive branch actions are moving forward without Congressional or statutory approval.

In the coming months, I look forward to a robust oversight of NOAA’s programs and activities to ensure that species, coastal areas—and American jobs—are protected for generations to come, and that NOAA’s decisions are based on sound science and only move forward under proper statutory authority.

Dr. FLEMING. Thank you, Chairman Hastings, for that. We also offer the same courtesy to the Ranking Member of the Full Committee. However, he is not in attendance today. So next up will be our witness, and I would like to introduce her.

Our witness today is Dr. Jane Lubchenco, Under Secretary of Commerce for Oceans and Atmosphere, and NOAA Administrator. Like all witnesses, your written testimony will appear in the full hearing record.

So I ask that you keep your oral statements to five minutes. As outlined in our invitation letter to you, and under Committee Rule 4[a]. Our microphones are not automatic, and so please push the button when you are ready to begin.

While you have testified before this Subcommittee in the past, I will give a quick reminder on our timing lights, and how they work. Basically, it remains green four minutes, and then yellow for one minute, and then red.

Obviously, you don’t have to stop in mid-sentence, but try to wrap up in another sentence or two at that point. When you begin to speak our clerk will begin the timer as I indicated, and then you may complete the sentence at the end of that.

And then one final footnote that I just learned is that Dr. Lubchenco is a new grandmother. So we want to congratulate you for that. I think a two week old is my understanding?

Dr. LUBCHENCO. That is correct.

Dr. FLEMING. And speaking as a two time grandfather, you have quite an enjoyable journey ahead of you. So I want to thank you for that. So your five minutes is beginning, and Dr. Lubchenco, go forward.

STATEMENTS OF DR. JANE LUBCHENCO, UNDER SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE AND ADMINISTRATOR, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION; AND ERIC SCHWAAB, ASSISTANT ADMINISTRATOR, NATIONAL MARINE FISHERIES SERVICE

Dr. LUBCHENCO. Thank you, Mr. Chairman. Thank you Members of the Committee. I appreciate this opportunity to present to you the President's Budget Request for NOAA for 2012. I want to begin by thanking you for your leadership and your support for NOAA.

As you know, we are one of the Nation's premier environmental science and stewardship agencies. The vital role that we play in the protection of life and property has been exemplified by NOAA's actions in the wake of the tragic events in Japan earlier this month.

The Japan earthquake and the resulting tsunami had far-reaching effects, and many of NOAA's programs played a critical role in issuing lifesaving information to emergency officials and the public in the United States and around the world as Delegate Sablan has noted.

I am honored to be here to discuss the President's Fiscal Year 2012 budget request, which recognizes the central role that science and technology play in creating new jobs, improving the health and security of Americans.

I wish to highlight four linchpins of our Fiscal Year 2012 request: key savings, satellites, fisheries, and protected resource management, and coastal and ocean services.

As part of the Administration's administrative efficiency initiative, NOAA analyzed its administrative costs and reduced non-essential spending by \$67.7 million. We conducted a rigorous review of our programs and activities, and identified additional savings.

The Fiscal Year 2012 request is \$5.5 billion, a decrease from the Fiscal year 2011 request, and an increase above Fiscal Year 2010 enacted, due primarily to our requirements to execute the restructured civil polar satellite program.

NOAA's satellites provide the data and information for forecasts that enables safe transportation, early response to severe weather, smart construction and emergency rescue missions.

The Fiscal Year 2012 budget request for the satellite service is \$2 billion, which we will invest in multiple satellite acquisition programs. This includes an increase of \$687.8 million for the joint polar satellite system.

This program is essential if we are to maintain the quality of our severe storm warnings, provide long term forecasts, and receive emergency distress signals in timely fashion.

Rebuilding our Nation's fisheries is essential to preserving the livelihoods of fishermen and related industries. In 2008, United States commercial and salt water recreational fisheries supported 1.9 million full and part-time jobs, and generated \$163 million in sales impacts.

In 2012, NOAA requests \$1.1001 billion to support fisheries and protected resource management. NOAA will invest \$67 million to expand annual stock assessments.

This investment is essential for setting annual catch limits at the most optimal level so that the return to fishermen is maximized, while maintaining the health of the resource.

NOAA will also invest three million to improve the timeliness and quality of catch monitoring and recreational fisheries to ensure that they are not unnecessarily restricted due a lack of data.

This is part of a broader effort to work more closely with the recreational fishing community. We will also continue to support the national catch share policy and the consideration of catch share management by councils.

Catch shares are difficult and sometimes controversial to implement, but when well designed, they have yielded significant financial and ecological benefits, as well as improved safety for fishermen.

Numerous coastal communities along our coast are being impacted by the loss of fishing opportunities. The Fiscal Year 2012 budget requests eight million to support the National Working Waterfronts Grant Program to assist fishing dependent coastal communities.

These grants will provide resources to such communities for planning activities that support economic diversity, resource conservation, and economic capital growth. It is expected that the Nation's coastal population will grow by more than 11 million by 2015.

Also, this budget includes \$559 million to enable NOAA to continue delivering a dynamic range of services promoting safe, healthy, and productive ocean coasts and great lakes. A pivotal event in 2010 was the explosion of the *Deepwater Horizon* oil rig on April 20. NOAA responded within minutes, within hours, providing targeted weather forecasts and trajectory maps, mobilizing personnel to respond to it, because of the largest oil spill in United States history.

Oil spills remain a significant concern and this budget requests \$2.9 million to develop an oil spill research and development program. NOAA also requests \$5 million to implement the United States Integrated Ocean Observing System Surface Current Mapping Plan.

The system uses high frequency radar surface current measurements, which are vital to oil spill response, national defense, search and rescue, as well as water quality monitoring and research.

And in closing I would like to note that I have a nickel in my hand. This nickel represents what I believe is one of the best bargains for the American public. It costs each American less than five cents a day to operate NOAA, and this nickel gives you the best weather information in the world.

It allows us to save lives and property when severe storms strike. This nickel means that our coasts are more healthy and vibrant, and in-turn our coastal communities are more prosperous.

This nickel helps American businesses succeed, from the fishermen on the coast, to the farmer in the heartland, and everything in between. This nickel helps keep our homeland secure.

At NOAA our work is everyone's business. We take our work seriously because we know that citizens and businesses depend on us each and every day. I look forward to working with the Members

of the Committee and our constituents to achieve this goal. I am happy to respond to questions that the Committee might have. Thank you very much.

[The prepared statements of Dr. Lubchenco and Mr. Schwaab follow:]

Statement of Jane Lubchenco, Ph.D., Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator, National Oceanic and Atmospheric Administration, U.S. Department of Commerce

Chairman Fleming and members of the committee, before I begin my testimony I would like to thank you for your leadership and the support you have shown the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA), one of the Nation's premier environmental science and stewardship agencies. Your continued support for our programs is appreciated as we work to improve the products and services that are vital to supporting America's businesses, communities, and people. I am honored to be here as the Under Secretary of Commerce for Oceans and Atmosphere at NOAA to discuss the President's FY 2012 budget.

Secretary Locke is singularly focused on how the Department of Commerce can help American businesses compete for the jobs of the future. As part of the Commerce Department, NOAA generates value for the Nation by providing the information and services that communities, managers, businesses, and individuals rely on every day to make decisions about their lives and businesses. NOAA touches the lives of every single American; we work 24/7 to keep families safe, property protected, living marine resources vibrant, communities thriving, and businesses strong. NOAA works everywhere, in every state, and from the surface of the sun to the depths of the ocean. Our research informs our many services and science guides our stewardship of the oceans, coasts, and Great Lakes.

The vital role NOAA plays in the protection of life and property has recently been exemplified by NOAA's action in the wake of the earthquake and resulting tsunami in Japan last month. NOAA played a critical role in issuing life-saving information to emergency officials and the public in the U.S and around the world. I'm sure I echo the sentiments of many when I say that our hearts, thoughts and best wishes are with the people of Japan and the survivors of the cataclysmic earthquake and tsunami that, in a matter of minutes, took the lives of thousands and forever changed the lives of millions. NOAA will continue to provide whatever support we can as those affected recover and rebuild from this tragedy.

The President's FY 2012 budget request promotes innovation and American competitiveness and lays the foundation for long-term economic growth, while making responsible reductions. In particular, the budget recognizes the central role that science and technology play in stimulating the economy, creating new jobs, and improving the health and security of Americans.

FY 2012 BUDGET REQUEST AND FY 2010 HIGHLIGHTS

Secretary Locke has brought a dedicated focus on efficiency and good management to the Department of Commerce. As part of the Administration's Administrative Efficiency Initiative, an aggressive government-wide effort to curb non-essential administrative spending, NOAA analyzed its administrative costs and reduced non-essential spending by \$67.7 million. Beyond administrative savings, NOAA engaged in a rigorous review of its programs and activities and identified additional savings that were achievable. For example, we were able to reduce the cost of operating our current satellite programs, and we restructured our international portfolio of climate research. Further, as a member of the newly established Gulf Coast Ecosystem Restoration Task Force we are working with federal and state agencies to find efficiencies, improve coordination and accountability in restoring Gulf Coast ecosystems.

In short, the FY 2012 budget for NOAA reflects our efforts to focus on program needs, identify efficiencies, and ensure accountability. It sustains core functions and services, and proposes increases for only the most critical programs, projects, or activities necessary to address the growing demand for NOAA's science, services, and stewardship. The FY 2012 request is \$5.5 billion, which is a decrease from the FY 2011 request. The FY 2012 request is an increase above FY 2010 enacted due primarily to our requirements to execute the restructured civil polar satellite program. As I will discuss later, this new generation of satellites is needed to replace satellites that will go out of service in the years to come. They are essential for both routine weather forecasts on which the private weather industry depends, and for storm warnings and watches that only the government can issue. The expenditures

on satellites are mission critical for NOAA. People's lives and property depend on them. This year 21 people have been rescued because of NOAA satellite tracking, and 91 have been rescued since last October. Beyond weather forecasts, fishermen and recreational boaters count on NOAA satellites to keep them safe in the event of an emergency at sea.

The FY 2012 NOAA budget recognizes that environmental and economic sustainability go hand in hand. We learned through the BP Deepwater Horizon oil spill and other events that we cannot have healthy economies without healthy communities and healthy ecosystems and that good science and stewardship is good business. NOAA's 2012 budget makes the investments needed to save lives and livelihoods, to understand these critical connections, and to ensure sustainable communities, economies, and ecosystems.

Now I will turn to the details of the FY 2012 budget request and outline areas of significant investment.

Climate Service

The FY 2012 budget request includes a proposed budget-neutral reorganization that brings together NOAA's existing widely dispersed climate capabilities under a single line office management structure called the Climate Service. The proposed organization mirrors the structure recommended by the National Academy of Public Administration expert panel that, at Congress' request, completed a study on options for a climate service in NOAA. The principal goal of this budget-neutral reorganization is to better align NOAA's existing assets under a unified leadership to more efficiently and effectively respond to the rapidly increasing public demand for climate services. The Climate Service would provide reliable and authoritative climate data, information, and decision-support services, and to more effectively coordinate with other agencies, partners, and the private sector. And—important to this committee and to me—the proposed structure would strengthen the world-class science for which NOAA is justly known. Without continued advances in the science that supports our mission, the utility of services will degrade with time. Hence, the success of this organization requires attention to strengthening our core science capacity, strengthening the service-provision capacity and strengthening the connections between the two.

NOAA is continually improving our scientific and technological capacity to develop and deliver a range of science and services. For example, NOAA's improved maximum precipitation predictions have been used to develop new standards for dam design that are being implemented around the Nation to improve dam safety and reliability. Similarly, through collaboration with the National Association of Home Builders and the Department of Housing and Urban Development, NOAA developed an Air Freezing Index that the home building industry estimates saves \$300 million annually in construction costs and the equivalent of 9 million gallons of gasoline.

The budget-neutral realignment of resources within the current NOAA budget would not change staffing levels, would not require employee relocations, physical relocation of programs or labs, any new facilities, and would not increase the size of NOAA's overhead. The Climate Service headquarters would be located in Silver Spring, Maryland.

The NOAA Climate Service, if approved by Congress, would have a budget of \$346.2 million. Of this amount, NOAA proposes \$3.0 million to support the Regional Climate Centers (RCC) in FY 2012. This funding will maintain support for RCCs as critical NOAA partners in the development and delivery of regional climate services. The RCCs will be aligned with the six NOAA Climate Service Regions and fully integrated as core components of NOAA's regional climate services partnership. Each center will function as a source of expertise in the region, working to identify stakeholder needs and matching these needs with the emerging science and decision support services flowing from the Climate Service's core capabilities. For example, this work could improve products for farmers, who already rely on NOAA climate data, particularly in El Niño/Southern Oscillation years, to make smart decisions about what variety of seed to plant and the amount of fertilizer to use. These types of forecasts can potentially provide a \$500-\$960 million per year benefit to the U.S. agriculture industry.

National Weather Service (NWS)

NOAA's National Weather Service (NWS) is the Nation's first line of defense against severe weather. NOAA provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, and adjacent waters for the protection of life and property and the enhancement of the national economy. More sectors of the U.S. economy are recognizing the impacts of weather, water, and climate on their operations and are becoming more sophisticated at using weather-related

information to make better decisions. The NWS provides critical information to communities and emergency managers. In 2010, the United States experienced a number of extreme weather events including the historic winter blizzards in the Northeast early in the year, historic flooding in the Midwest and Tennessee, and the third most active Atlantic hurricane season on record. The tragedy of the March 2011 tsunami in Japan, which had far reaching effects including the U.S. West Coast, reinforces the very real threat of severe weather events, and underscores the value of comprehensive warning systems and a prepared public.

The FY 2012 request for NWS is \$988 million. The request envisions using cost-cutting and cutting-edge technologies to better support the programs necessary to achieve NOAA's vision of delivering more reliable forecasts, reducing weather-related fatalities, and improving the economic value of weather, water, and climate information.

Weather-related air traffic delays cost the U.S. economy over \$41 billion in 2007, according to the Congressional Joint Economic Committee. Two thirds of these delays could be avoided with more accurate and better-integrated weather information for decision-making. To meet the rising demands of the air transportation industry, NOAA is involved in a collaborative partnership with the Federal Aviation Administration (FAA) and other Federal agencies to create the Next Generation Air Transportation System (NextGen). NOAA requests a \$26.9 million increase to modernize our aviation weather forecasts and warnings. This funding supports NextGen development activities, allowing for better integration of weather information into decision-making solutions for the FAA—potentially reducing the number of air delays.

Wind shear is hazardous to aviation and critical to hurricane formation and intensity. The Nation's upper air (UA) network enables unmatched ability to detect this wind shear and enables much improved ability to define the jet stream core by providing approximately 78,000 atmospheric profiles (wind, humidity, temperature, pressure and altitude) per year from ground level to up to 60,000 feet. To improve the UA network, NOAA requests a \$5 million increase for new GPS radiosondes to provide a 50 percent improvement in wind measurement accuracy and a 6-fold improvement in vertical resolution. With this investment, NOAA will fully fund the purchase of GPS radiosondes for all 102 UA observing stations, ensuring improvements to weather models.

Large maritime data voids exist where no meteorological or oceanographic data are routinely sampled due to poorly maintained buoys. This lack of data makes it difficult for forecasters to make accurate and timely marine warnings and forecasts and to measure the accuracy of their forecasts. NOAA currently operates 101 moored, weather observation buoys and 49 coastal, marine automated network stations. However, over the last eight years, system performance has trended downward to the current low of 67 percent data availability as of February 2011. This trend will continue downward to 65 percent data availability by 2011 without increased support. NOAA requests a \$4 million increase to provide operations and maintenance funding for damaged and destroyed buoys and to comply with new international regulations. Funds will also be used to begin reducing the backlog of deferred maintenance by employing charter vessels to supplement the diminishing availability of U.S. Coast Guard ship time for servicing the weather buoy network.

In FY 2012 NOAA requests a total of \$41 million, including \$10.2 million from mandatory funds provided by the Deficit Reduction Act of 2005, to support our tsunami warnings and research activities. Within minutes after the March 11th earthquake struck, NOAA issued its first tsunami warning for Japan, Russia, Marcus Islands, and Northern Mariana Islands as part of the coordinated global response to this tragic natural disaster. Shortly thereafter, timely watches, advisories, and warnings were extended to vulnerable coastal areas of Alaska, British Columbia, California, Washington, Oregon, and Hawaii well ahead of the arrival of the first waves. To maintain the effectiveness of these services, NOAA's Tsunami Program will use the FY 2012 funding to continue operations of NOAA's Deep-ocean Assessment and Reporting of Tsunami (DART®) buoy network, maintenance of its 164 sea-level stations, and funding of its two Tsunami Warning Centers (TWC). NOAA will continue to expand community preparedness and finalize the balance of the tsunami hazard mitigation models (to cover all US coastal areas). NOAA will also continue research to improve its tsunami warning and forecast capabilities, and the completion of high resolution models for tsunami inundation forecasts for tsunami threatened local communities.

Although NOAA's Tsunami Warning Centers and DART stations are operated by NWS, NOAA drew from the capabilities of all our line offices to provide a comprehensive response to the March 2011 tsunami. The following are examples of the contributions from other parts of NOAA:

- NOAA's DART stations, a result of research performed at NOAA's Office of Oceanic and Atmospheric Research, detected and tracked the tsunami as it traveled from Japan across the Pacific Basin.
- National Ocean Service tide gauges, which help detect the presence of a tsunami wave, use GOES satellites operated by NOAA's Satellite Service to relay data to the tsunami warning centers.
- NOAA response teams from the National Ocean Service are in California to assist with detection of submerged debris resulting from the tsunami in marine transportation arteries along the coast.

Finally, the underpinning of NOAA's products and services mentioned previously is the model-based guidance of NOAA's operational high performance computing (HPC). HPC provides models and model-based estimates of both current and future states of the Earth's environment, which are a key component of modern weather forecasts. NOAA requests an \$11 million increase towards transitioning NOAA's HPC to a new contract, as well as continuing regular improvements to our numerical weather prediction modeling.

National Environmental Satellite Service (NESS)

NOAA's satellites provide the data and information for forecasts that are vital to every citizen in our Nation. From safe air, land, and marine transportation to construction and emergency rescue missions, we all use satellite products in our everyday lives. In FY 2010, our satellite program saw a major milestone accomplished with the launch of Geostationary Orbiting Environmental Satellite (GOES)—15, the final spacecraft in the latest series. GOES-15 joined three other GOES spacecraft in assisting the Agency's forecasters to more accurately track life-threatening weather from tornadoes, floods, and hurricanes to solar activity that can impact satellite-based electronics, communications, and power industries. In FY 2010, NOAA satellites also provided key support in the rescue of 281 people throughout and near the United States by providing their location to emergency responders.

The proposed reorganization would also affect some programs within the National Environmental Satellite, Data, and Information Service (NESDIS), which would be renamed the National Environmental Satellite Service (NESS), as all three of its Data Centers would be transferred to the Climate Service. The FY 2012 budget request for NESS is \$2 billion, which we will invest in multiple satellite acquisition programs for the continuity of critical weather, climate, and oceanographic data. NOAA requests an increase of \$687.8M for the Joint Polar Satellite System (JPSS), which is NOAA's responsibility under the former National Polar-orbiting Operational Environmental Satellite System (NPOESS) program. Polar satellites provide critical weather forecasting for the \$700 billion maritime commerce sector and provide a value of hundreds of millions of dollars to the fishing industry. The satellites save approximately \$200 million each year for the aviation industry in ash forecasting alone and provide drought forecasts worth \$6–8 billion to farming, transportation, tourism and energy sectors. Both civilian and military users will use JPSS data and products, which will continue to fulfill NOAA's requirements to provide global environmental data used in numerical weather prediction models for forecasts. On behalf of NOAA, the National Aeronautics and Space Administration (NASA) will serve as the lead acquisition agent for JPSS, which supports the afternoon mission requirements. The Department of Defense will continue the acquisition of early morning orbit assets. NOAA is committed to working with our partners to complete the transition from the NPOESS program and to assure the continuity of Earth observations from space.

The GOES-R series satellites will provide critical weather observations for severe weather events, such as hurricanes, and also provide key enhancements in observational capabilities for climate, oceans and coasts, and the space environment. This program is the next-generation of geostationary satellites and provides mission continuity through 2036. NOAA continues to support the GOES-R program with a re-phasing, taking us from a two-satellite program to a four-satellite program with the addition of two optional satellites (GOES-T&U), while still providing continued satellite engineering development and production activities for GOES-R and GOES-S.

An uninterrupted climate record is critical to understanding global sea level rise, which directly threatens coastal communities and ecosystems through increased exposure and erosion, more intense storm-surge and tidal flooding, and loss of natural habitat due to drowned wetlands. Therefore, NOAA is requesting an additional \$33.0 million to continue development of the Jason-3 satellite, which will provide continuity of sea surface height measurements, ensuring an uninterrupted climate record of over 20 years. The Jason-3 mission is a joint U.S.—European funded partnership. NOAA requests an \$11.3 million increase to partner with the Taiwan National Space Organization for the launch of 12 satellites to replenish and upgrade

the Constellation Observing System for Meteorology, Ionosphere, and Climate (COSMIC) satellite constellation. This program is a cost effective means of obtaining information about temperature and moisture in the atmosphere around the globe, which will improve forecasting accuracy.

In addition, a requested increase of \$47.3 million will support, in cooperation with NASA, refurbishing the existing NASA Deep Space Climate Observatory (DSCOVR) satellite and its solar wind sensors and developing a Coronal Mass Ejection Imager. The data and information provided by DSCOVR will support the operations of the Space Weather Prediction Center, which generates accurate and timely 1 to 4 day space weather forecasts and warnings. Space observations of geomagnetic storms are vital to reduce negative effects to power grids, GPS, telecommunications, the health and safety of astronauts, and the viability of satellite systems.

Oceanic and Atmospheric Research (OAR)

The major change as a result of the proposed reorganization to create a Climate Service (described above) is that NOAA would also strategically realign its existing core research line office, the Office of Oceanic and Atmospheric Research (OAR), to strengthen the agency's overall science enterprise and advance the atmospheric and ocean, coastal, and Great Lakes research and applied science goals expressed in the *America COMPETES Reauthorization Act of 2010*. OAR will refocus its work to serve as an innovator and incubator of new science, technologies, and applications, and an integrator of science and technology across all of NOAA.

NOAA is committed to strengthening and integrating NOAA's science enterprise consistent with the President's call for science and innovation. NOAA's request includes \$212 million for OAR to continue strengthening core capabilities, such as improving our understanding of ocean acidification and its impacts, and promoting conservation and use of America's coastal resources through our renowned Sea Grant Program, one of our many direct links to universities, citizens, and communities around the Nation. NOAA will also invest in the future by supporting innovation in weather forecasting science that can inform clean, renewable energy generation, which is related to an MOU with the Department of Energy. In FY 2012, NOAA requests \$2 million to support research in targeted wind resource regions across the Nation. Funding will advance weather forecast accuracy and quality to allow for more efficient implementation of wind power usage in the United States.

Another core capability at NOAA is exploration. The NOAA Ship *Okeanos Explorer* is among the most technologically advanced research vessels and platforms for ocean exploration in the United States. In FY 2012, NOAA is requesting an additional \$1.5 million to advance the operations of the *Okeanos Explorer* with the operation of telepresence technology, which enables scientists, educators, and others to participate and lead ocean exploration missions from remote shore-based Exploration Command Centers; to operate and upgrade the ship's autonomous and remotely-operated vehicles; provide additional scientific days at sea; and reduce our huge knowledge gap of what lies in the deep ocean.

National Marine Fisheries Service (NMFS)

NMFS conserves, protects, and manages living marine resources to sustain marine ecosystems, afford economic opportunities, and enhance the public's quality of life. Rebuilding our Nation's fisheries is essential to preserving the livelihoods of fishermen and related industries. In 2008, U.S. commercial and saltwater recreational fisheries supported 1.9 million full- and part-time jobs and generated \$163 billion in sales impacts.¹ In FY 2012, NOAA requests \$1.001 billion to support fisheries and protected resource management to ensure an optimal balance between conservation objectives and economic opportunities.

NOAA is making important strides to end overfishing, improve fishery management, and put fisheries on a path to sustainability. Working with the Regional Fishery Management Councils, in FY 2010, five fisheries stocks were rebuilt. Based on estimates, rebuilding U.S. fisheries would increase the current dockside value by an estimated \$2.2 billion (54 percent) annually from \$4.1 billion to \$6.3 billion annually. In FY 2012, NOAA will continue to maximize the potential of the Nation's most economically important fish stocks through sound science and management. NOAA will invest \$67 million to expand annual stock assessments to continue to ensure Annual Catch Limits (ACL) are based on the best available science. ACLs and accountability measures (AM) are required under the 2007 reauthorization of the *Magnuson-Stevens Fishery Conservation and Management Act* for all non-exempt fish stocks, including overfished stocks, by the end of 2011 to end over-

¹ Fisheries Economics of the United States, 2008: http://www.st.nmfs.noaa.gov/st5/publication/fisheries_economics_2008.html

fishing. This investment will help verify that NOAA successfully ended overfishing ensuring ACLs are set at the most optimal level possible so that the return for fishermen is maximized while maintaining the health of the resource.

NOAA will invest \$3 million to improve the timeliness and quality of catch monitoring in recreational fisheries to ensure recreational fisheries are not unnecessarily restricted due to a lack of data. This is part of a broader effort to work more closely with the recreational fishing community.

In addition to sound science, robust management strategies are vital to sustainable fisheries. In 2010, NOAA released the National Catch Share Policy, and we will continue to support consideration of catch share management by the Councils. Catch share programs, which include limited access privilege programs and individual fishing quotas, dedicate a secure share of fish to individual fishermen, cooperatives, or fishing communities. In the United States, catch shares are currently successfully implemented in 15 fisheries from Alaska to Florida, and local Fisheries Management Councils are in the process of developing them in several additional fisheries. Catch share programs are difficult and sometimes controversial to implement, and we recognize that some in Congress are concerned about them. But they have yielded significant financial and ecological benefits to the fisheries that utilize this system. Both here and in other countries, catch shares help to eliminate overfishing and achieve annual catch limits, improve fishermen's safety and profits, and reduce the negative biological and economic effects of the traditional "race for fish." This budget includes \$54 million to support the voluntary establishment of catch share programs by those Councils that want to utilize this tool to achieve the *Magnuson-Stevens Act* requirements. We want to support those Councils that believe that catch shares are the way to better manage their fisheries but need assistance in designing and implementing them.

In addition to fisheries, NOAA manages protected resources, such as marine mammals and turtles. This requires balancing conservation objectives and economic opportunities, including commercial fishing activities and energy development. Investments in priority research in recovery actions are required to mitigate harm and maximize economic potential. In FY 2012, NOAA will invest an additional \$2.5 million dollars to increase NOAA's capacity for protected species stock assessments that provide the foundation of information for decision makers. We will continue supporting the Species Recovery Grants Program with a requested \$8.0 million increase to provide grants to states and tribes to conduct priority recovery actions for threatened and endangered species, including restoring habitat, monitoring population trends, developing conservation plans, and educating the public.

Managing fisheries and protected species to their full biological and economic potential requires additional efforts focused on maintaining habitat and ecosystem functioning. NOAA requests \$24 million for the Community Based Restoration Program, including a new \$5 million effort to address larger restoration projects. NOAA plans to increase fish passage, spawning, and rearing habitat by implementing large-scale ecological restoration in targeted areas such as wetlands. To support the restoration and protection of the Chesapeake Bay, we request a \$5 million increase for regional studies in the Bay. NOAA supports the President's Executive Order to restore the Chesapeake Bay by providing enhanced understanding of the relationships between the Bay's living resources and habitat, coordinating protection and restoration of key species and habitats across jurisdictional lines, and supporting a coordinated system of monitoring platforms distributed across the Bay.

National Ocean Service (NOS)

In July 2010, President Obama signed Executive Order Number 13547 that adopted the Final Recommendations of the Interagency Ocean Policy Task Force and established the National Policy for the Stewardship of the Oceans, Coasts, and the Great Lakes—reinforcing the notion that "healthy oceans matter." NOS supports this policy by translating science, tools, and services into action to address coastal threats such as climate change, population growth, port congestion, and contaminants in the environment. A pivotal event in 2010 was the explosion of the BP Deepwater Horizon oil rig on April 20. Within hours, NOAA responded, providing targeted weather forecasts and oil spill trajectory maps and mobilizing personnel and assets to respond to what evolved into the largest oil spill in U.S. history. The Office of Response and Restoration (OR&R) played a critical role in our response and is leading our efforts to assess damage caused by the event. Over half of the U.S. Gross Domestic Product is generated in coastal counties,² and it is expected that the Nation's coastal population will grow by more than 11 million by 2015 so

² Kildow, J. T., C. S. Colgan, and J. Scorse. 2009. *State of the U.S. Ocean and Coastal Economies 2009*. National Ocean Economic Program.

NOS' services will become more vital to the coastal environment and economy.³ Increasing population density, growing economies, and increased vulnerability to damages from hazards such as sea level rise or storms, habitat loss, and other threats makes the task of managing coastal resources more difficult. The President's FY 2012 Budget includes \$559.6 million to enable NOAA to continue delivering a dynamic range of nationwide coastal and Great Lakes scientific, technical, and resource management services to meet the vision of being a Nation with safe, healthy, resilient, and productive oceans and coasts.

Human uses of ocean resources (e.g., ocean-based energy, marine aquaculture, commercial and recreational fishery products, shipping and navigation services, and other activities) need to be managed holistically. In FY 2012, NOAA requests \$6.8 million to develop an agency-wide capability to conduct and support Coastal and Marine Spatial Planning (CMSP) in U.S. waters. CMSP will help us manage ocean resources in a systematic way by evaluating competing ocean uses, assessing opportunities and potential cumulative impacts, and working with industry, state and local decision makers and other stakeholders, to explicitly make trade-off decisions. CMSP is designed to focus on up front planning. There are no regulations involved. It does not add another layer of government but is designed to be more efficient, effective, and reduce redundancies in decision making. With the new Ocean Policy we are already witnessing efficiencies in our mapping and data collection across the Federal government, with data and information from the Departments of Defense and the Interior, and from Coast Guard, being integrated into a common database, which will be available to the public in the future.

The Final Recommendations of the Interagency Ocean Policy Task Force include a framework for implementing CMSP across the United States in a manner that respects regional variation of issues and priorities. This initiative will significantly advance the Nation's capability to effectively and transparently match competing human uses to appropriate ocean areas. To further support CMSP and regional ocean governance, NOAA requests \$20 million to establish a competitive grants program that will support regional ocean partnerships, such as the Gulf of Mexico Alliance, South Atlantic Governor's Alliance, and the West Coast Governor's Agreement on Ocean Health that are vital for advancing effective ocean management. In addition, a proposed increase of \$1 million in our mapping program will significantly improve the accessibility of integrated ocean and coastal mapping data.

The BP Deepwater Horizon oil spill is a stark reminder that spills of national significance can occur despite the many safeguards and improvements that have been put into place since the *Oil Pollution Act of 1990* was enacted. The risk of oil spills remains a concern given increases in marine transportation, pressures to develop domestic areas for drilling offshore, aging infrastructure susceptible to sea level rise and violent storms in U.S. coastal areas, and opening the Arctic to both shipping and oil development. NOAA's OR&R is the lead trustee for the public's coastal natural resources and an international scientific leader for oil spill response, assessment, and restoration. NOAA requests \$2.9 million to develop an oil spill research and development program within OR&R to advance response technologies and capabilities, especially in deep water and Arctic environments. With this funding, NOAA will support external grants for essential research to provide useful information, methods, and tools for planners, oil spill responders, and assessment practitioners. Also in support of oil spill response, NOAA requests a \$5.0 million increase to implement the U.S. Integrated Ocean Observing System (IOOS[®]) Surface Current Mapping Plan using high frequency (HF) radar surface current measurements. HF radar provides information vital to oil spill response, national defense, homeland security, search and rescue operations, safe marine transportation, water quality and pollutant tracking, and harmful algal bloom forecasting.

The BP Deepwater Horizon oil spill made it apparent that the economic and social well being of our coastal communities depends on the environmental suitability of our coastal resources. Numerous coastal communities, not only in the Gulf but all along our coasts, are being impacted by the loss of fishing opportunities. In FY 2012, NOAA requests \$8 million to create a National Working Waterfronts grant program to assist fishing-dependent coastal communities. These grants will assist distressed or at-risk fishing communities by providing resources for planning, capacity building, and other activities to support economic diversity, resource conservation, and economic capital growth.

Program Support

To deliver sound science and services, NOAA must continue to invest in its information technology (IT) infrastructure, the maintenance and construction of NOAA

³Population Trends Along the Coastal United States: 1980–2008, NOAA 2004.

facilities, and the specialized aircraft and ships that complete NOAA's environmental and scientific missions. A requested \$9.1 million increase will reduce the risk of cyber attacks by enhancing security monitoring and response capabilities and consolidate our IT infrastructure into a single enterprise network. This budget includes an additional \$10 million to support major restoration and modernization projects to address critical facility condition deficiencies and to improve safety and operating conditions in support of NOAA's mission. The FY 2012 request ensures that NOAA's fleet of vessels is able to provide reliable, compliant, and high-quality ship support to NOAA programs through several increases. For example, \$3.4 million is requested to support environmental compliance costs, including ensuring that NOAA ships are not contributing to water quality degradation. Efforts to extend and maintain the life of the NOAA ships will be supported through an \$11.6 million increase for repair periods.

Also critical to the execution of NOAA's mission is our investment in the future. Students in K-12 we support today become our workforce of the future; undergraduate and graduate fellowship recipients provide immediate dividends; and each and every citizen touched by our literacy and outreach efforts become stewards of our natural resources. These down payments help to fulfill the President's commitment to education. The FY 2012 budget includes \$20.8 million for NOAA's Office of Education to implement and manage scholarship programs aimed at fostering competitiveness in science, technology, engineering and math by providing quality educational opportunities.

Conclusion

Overall, NOAA's FY 2012 budget request reflects the commitment that Secretary of Commerce Gary Locke and I have made to the President to out-educate, out-build, and out-innovate our competitors in support of robust economic job growth. We have made tough choices to cut lower priorities and identify cost-savings measures. The resources that are requested in this budget are critical to the future success of meeting our needs in climate, fisheries, coasts, and oceans. I look forward to working with you, the Members of this committee, and our constituents to achieve the goals I have laid out here through the implementation of the FY 2012 budget. Thank you for the opportunity to present NOAA's FY 2012 budget request. I am happy to respond to any questions the committee might have.

Dr. FLEMING. I thank the witness. Next, I would like to entertain a motion from Mr. Young.

Mr. YOUNG. Mr. Chairman, I would just like to ask for unanimous consent to submit questions to the witnesses to answer. I will be unable to return at three o'clock. I have another engagement.

Dr. FLEMING. Thank you, sir. Without objection. We have another motion?

Ms. BORDALLO. Thank you, Mr. Chairman. I am also the Ranking Member on an Armed Forces Subcommittee, and the meeting starts at 3:00, and so I would like also to submit my questions as they are important, and I have talked with the Ranking Member of this Committee if they could be submitted into the record.

Dr. FLEMING. Without objection. OK.

What we will try to do is to get through another couple of sets of questions or first set of questions here, and then we will probably break, and come back. We may have a span of about 15 or 20 minutes. So certainly stay tight for that.

I thank you for your testimony, and I will now recognize Members for questions, and first, I shall recognize myself for five minutes. As I review your budget request, it strikes me that approximately 61 percent of the NOAA budget is for satellites, weather, and climate programs.

And while I realize that your agency has more than one mission, it begs the question do you believe that you are doing an adequate job of managing the Nation's natural resources with less than half

of your budget spent on both science and management of those natural resources.

Dr. LUBCHENCO. Mr. Chairman, one thing that I think is important to recognize is that even though the budget is laid out by line offices, weather satellites, fisheries, et cetera, what we do is actually quite integrated.

Weather information depends on satellites, search and rescue operations for mariners depend on that weather information, that satellite information. Managing the fisheries' resources depend very much on that information as well.

So it is possible to do the partitioning and the calculations the way that you did it, but it is also important to recognize that those different pieces reinforce one another and integrate.

I believe that the satellite—obviously the largest portion of our program is in satellites, and those satellites are vitally important to saving lives, protecting property, enabling American businesses, and they directly support a lot of information about oceans that enable better resource management, whether it is harmful algal blooms, or understanding whether it is an El Nino or La Nina year, that kind of information is vitally important to managing the resources.

Dr. FLEMING. Madam Secretary, I certainly appreciate what you are saying on that. However, satellites are darn expensive. I think that we lost a couple of them in the oceans here not too long ago. They were not yours I don't believe.

But still there is a lot of risk to that, and one of the things that we are seeing is day to day important aspects of calculating, and surveying the fish population. We are getting further and further behind on that, while we are spending more and more money on very expensive technology, the majority of the budget as you can see.

And we are looking at long term trends. Of course, I am sure that there are some day-to-day priorities in there, too, but it really is concerning, I think, more and more folks over are we really being penny wise and pound foolish by spending so much money on things that have a very vague and maybe long term aspect, while we are ignoring some things.

So I will go into the second question real quick before I run out of time. While I don't mean to minimize the importance of other NOAA activities, Mr. Schwaab's testimony, written testimony, cites commercial and recreational fisheries supporting 1.9 million jobs, and generating \$163 billion in sales impact in 2008.

That is a huge economic driver and yet all of that is predicated on having good data on which to make management decisions. I wanted to note that your budget request includes an increase of \$16 million to expand annual stock assessments.

While updating stock assessments is important, without having recent survey information, the updated assessments will still be flawed unless the new survey data is included. And what of course that means is garbage in and garbage out. If we are using 10-year-old data, and then putting in the computers and spitting something out that is an updated number, it does not mean that it is accurate obviously, and back to my original statement, we have to be more

and more conservative over time, which limits the commercial fishing opportunities.

So my question is this. How much funding have you allocated for increasing and updating fishing surveys?

Mr. SCHWAAB. Thank you, Mr. Chairman. While the specific increase that is mentioned speaks to the stock assessment line, there is significant research that is ongoing on an annual basis that does provide the important data on an updated basis to feed into those stock assessments.

In fact, one of the things that we have done in recent years, particularly in the Southeast, is expand survey data associated with some of the data-poor stocks in the Southeast and in the Gulf Coast to help to inform those stock assessment deliberations.

I don't have it at my fingertips the actual total dollars associated with that full assessment work, but I will pull that out here momentarily for you.

Dr. FLEMING. OK. Well, I thank you for that, and my time is up. We are down to close to five minutes to the end of our first vote, and so we are going to go ahead and temporarily adjourn, and return in about 15 minutes. We only have two votes, and we will begin with Mr. Sablan, the Ranking Member of the Subcommittee.

[Recess.]

We are back in session, and I thank the witnesses for hanging around, and being prompt, and we have Members filtering in, but right now we have the most important Member, and that is the Ranking Member of the Subcommittee, who is next up for questions, and with that I will yield to the gentleman.

Mr. SABLAN. Well, thank you very much, Mr. Chairman, and thank you for your kind words. Dr. Lubchenko, the Deep Ocean Assessment and Reporting of Tsunami System, or DART, is a network of what, 39 buoys, that provide tsunami warnings to the United States Coast by satellite communication.

And as we saw this month with the Japan earthquake and tsunami, the DART system can save lives and property. But I understand that a single DART buoy in the Gulf of Mexico, and a DART buoy closest to the Northern Mariana Islands, are both out of commission.

The Marianas have the DART buoys that provide some warning, but there is only one buoy in the Gulf. We had that big earthquake in Haiti last year, and no tsunamis. But I would like to know how serious the threat of a tidal wave is to the Gulf States.

And I would like to know what kind of funding we need to make sure that our warning system does not have holes in it like it does now.

Dr. LUBCHENCO. Delegate Sablan, thank you for that question. It is true that 32 of our 39 DART buoys are currently operational, which means that seven are not. Often times those DART buoys become detached, or have instruments that are not functioning.

It is vitally important that we maintain them in an operational state, and normally there is a plan to do that by serving them periodically and repairing whatever is not functional.

However, those buoys are important for the whole tsunami warning effort, but the original—the initial warning is based primarily on the seismic information that comes from knowledge about where

an earthquake happens, how deep it is, where its position is, and how strong it is.

And based on that information—for example, in the case of the Japan earthquake, nine minutes after the earthquake happened, our first tsunami warning was issued. So the initial warning does not depend on the DART buoys, but as a tsunami, and in this case, is traveling across the Pacific, those buoys detect the passage of the tsunami, confirm that it is there, and also provide additional information via satellites to enable the models to be updated, and the warnings to be refreshed.

So it is either coming faster, or slower, or stronger, or weaker. So those DART buoys are critically important to the overall effort, but they alone are not responsible for the initial warning.

It is important that those buoys remain in operational state. Our research operation in our Seattle lab has developed some new tsunami buoys that are smaller and easier to deploy, and that is an opportunity for the future to add additional buoys at less cost.

Mr. SABLON. Thank you very much. I have a question for Mr. Schwaab, please. Some stocks requiring annual catch limits and accountability measures are considered data poor, including stocks in the Western Pacific.

Is the agency going to provide guidance to the regional fishery management councils on setting annual catch limits for species with little known information? And what would it take to get us information needed to set annual catch limits for data poor fisheries, and does NOAA's budget reflect that cost?

Mr. SCHWAAB. Yes, sir. Thank you, Delegate Sablan. There are a couple of components to the answer to your question. The first is how we deal with those stocks today for which we have inadequate assessments.

There are a number of techniques that are utilized to essentially provide proxies for setting appropriate annual catch limits where the status of stocks is currently unknown.

One example that I would identify for you is the ability, for example, to look at recent historical catches, recent historical landings, and set catch limits that are based upon those recent historical landings, and that is based upon the inherent assumption that catches have been stable over time, and that stocks have been stable over time.

And we have been continuing to work with the councils around the country in providing that kind of assistance as it relates to data for stocks. The second part of your question which speaks to bringing all of the stocks up to some standard level of assessment on a regular basis, and let me if I could just use this as an opportunity to go back and clarify the Chairman's question of a few moments ago.

And that is that the current budget, the Fiscal Year 2012 budget proposal, includes \$228 million, which captures all of the assessment and monitoring efforts that go into setting and undertaking appropriate assessments now.

Under the current proposed budget, which does include that \$15 million increase, which includes both the paperwork side of stock assessment, as well as some increases for surveys on the water, if we stay on that track, achieve that level of budget appropriations

and stay on that track, that would give us the ability to by our estimate provide adequate stock assessments for 167 of the 230 priority stocks by 2016.

Obviously there are a number of other stocks beyond that, and it would take considerably more money than is currently proposed.

Mr. SABLON. Thank you, Mr. Chairman. My time is up. Thank you.

Dr. FLEMING. OK. I thank the gentleman for his questions. Next we have Mr. Runyan. You have five minutes, sir.

Mr. RUNYAN. Thank you, Mr. Chairman. My first question is for Dr. Lubchenco. We have discussed that we are asking for a \$36.6 million increase in the catch shares program.

But the President's budget request also calls for a transfer of \$1.4 million from the fisheries research management program into catch shares, and also six million from the cooperative research to the national catch shares.

And we have only had three new catch shares programs that have been implemented since 2009. What is the intent of flooding the catch shares program with all this money?

Mr. SCHWAAB. If you don't mind, Mr. Runyan, I will answer that.

Mr. RUNYAN. That would be fine, yes.

Mr. SCHWAAB. Thank you. So just to provide some background on the catch share line item. As you indicated one of the benefits of catch share base program are significant new observer collection of data, observer-based collection of data at sea.

So it certainly is—there was a shift when this line was first created of cooperative research dollars into that catch share line of approximately \$4 million. It did not necessarily reflect, or it did not reflect a change in the purpose of that funding.

It did reflect the premise that observer based data and dock side monitored data associated with the catch shares program does feed into the kind of data needed to set appropriate catch limits and update those catch limits over time.

Mr. RUNYAN. My issue though is that we start implementing catch shares, and I actually sat down with a group of fishermen out of Long Beach Island, New Jersey, last week when I was back in the district, and they expressed concern that a lot of catch shares enforcement on people are going to push the small people out, and in essence making your ability to monitor that easier by not allowing the little guy to go out, or the recreational fisher, let alone to go out and fish.

Mr. SCHWAAB. So, thank you. First of all, I think one of the—just a couple of comments in response. One of the key elements or benefits of catch shares is that regardless of the type of fisherman, it provides for that fisherman more opportunity and flexibility to fish a dedicated share of an annual quota.

There are and have been concerns in a number of fisheries that as catch share programs are designed, they be designed in such a way as to protect the interests of small communities, remote communities, and in the case of a number of fisheries, small boat fishermen.

We have expressed a preference to have councils when they develop their management programs to look at catch shares as a potential option to be utilized. We have not at all mandated catch

share implementation, nor have we necessarily expressed catch shares as a panacea to address all of our fishery management challenges.

But in the place where catch shares have been implemented, including some of the programs that you mentioned over the last few years, they have been designed by fishery management councils that include the engagement of fishermen at the local level, and appropriate provisions are designed in to protect against the kind of concerns that you articulated.

Mr. RUNYAN. It is just alarming with the amount of money be moved into those types of programs that many people in my district disagree with, but to touch on—well, doctor, you have been familiar with ICCAT, and you have been involved with that for many years.

And specifically we have a lot of issues with our swordfish, and we may lose our share to a lot of European countries because we have our regulations in place kind of restricting us because of bycatch, and different things.

How are we going to be able to protect our fishermen and enable them to actually fish for swordfish, but if we lose our share to Europe, they are not so concerned about the bycatch issue. So how are we going to address this?

Dr. LUBCHENCO. Congressman, we worked very diligently this year at ICCAT to protect the interests of our fishermen, and to have other nations who fish, and in this case in the Atlantic, abide by similar kinds of bycatch reduction strategies.

And we were successful in accomplishing some of that. There is more work to be done. I think that it is important to also note that we did preclude some bad things from happening to our fishermen.

There were some attempts to take away some of our quota, which did not happen, and I think that that—I just want to emphasize that we were working together with and on behalf of our fishermen at the ICCAT meetings.

Mr. RUNYAN. Well, thank you, because if they lose that quota, it is even harder to get it back. So my time is expired. Thank you, Mr. Chairman.

Dr. FLEMING. I thank the gentleman. Next is the gentlelady from Hawaii.

Ms. HANABUSA. Thank you, Mr. Chairman. First of all, Dr. Lubchenco, I would like to congratulate you and to thank NOAA on your great work. As you know, the Pacific tsunami warning center did an extraordinary job for those of us in Hawaii.

We did not suffer any loss of lives, but more importantly than that, they were spot on in their predictions of what would happen. And I was watching it from here, and it was very interesting to see that even CNN and any other newscasts, including the Japanese one, were quoting the Pacific Tsunami Warning Center.

However, having said that, we all know that the Pacific tsunami, since its inception, I believe, has been an earmark, and therefore it will not appear in the budget in the form that we have seen it in the past.

Because of its importance, I would like to know what you will do, and how it appearing within the budget, whether we are going to suffer any loss as far as the funding for the Pacific Tsunami Warn-

ing Center, especially when we feel that its importance has proven more so as a result of the recent tsunami and earthquake in Japan.

Dr. LUBCHENCO. Thank you for that question and thank you for the compliments to our team. They really did a spectacular job. The current tsunami warning program has benefitted significantly from funds that were received from the digital television spectrum auction proceeds.

That has been used to do a number of different things to update, and to enhance the tsunami community preparedness through grants, and to do research to improve our tsunami forecast inundation models, and to enhance the communication and information technology infrastructure at the warning centers.

So some of those funds have already been awarded. Others are yet to come, and we were instructed to use a balance of those for some of those different functions, and we are on track with that right balance.

So I think that that part is very much to the benefit of the overall program. There does remain some concern about our ability to continue to maintain the DART buoys, and the tide gauges that need constant maintenance, in addition to the actual Tsunami Warning Centers themselves.

And we will continue to include all of those to the best of our ability as we make very tough funding decisions, not just this year, but down the road.

Ms. HANABUSA. If we are suffering the budget cuts that you saw, for example, in H.R. 1, would the buoys and DART, and the various monitoring devices that are necessary, would they also be affected?

Dr. LUBCHENCO. You know, I think that it is probably impossible to say exactly what the impacts of funding at that level will be. I would say that cuts that are that deep, and especially ones that come so late in the year, would undoubtedly have to impact almost every one of our programs.

But to be more specific than that, and specify how, so much of it depends on when we know for sure what the Fiscal Year 2011 budget is, and what instructions come along with that.

Currently, we are not issuing the contracts to go out and service the tsunami DART buoys because of the CR. So those buoys that are not functional are not being serviced. So there is—we can still issue warnings. The rest of the buoys are functional. They provide some redundancy.

But the more that we go into this year and the deeper the cuts are, the more seriously they will affect every single program, and I am sure that that one will be affected, as will all the others.

Ms. HANABUSA. Thank you. Mr. Chairman, I am out of time, but I do have some questions for Mr. Schwaab that I would like to submit in writing with your permission.

Dr. FLEMING. Without objection.

Ms. HANABUSA. Thank you.

Dr. FLEMING. OK. Our next questioner is the gentleman from Florida, Mr. Southerland.

Mr. SOUTHERLAND. Doctor, thank you for appearing today. I wanted to ask some questions regarding the catch limits. How many fishery closures have been implemented as a result of the

new annual catch limits and accountability measure provisions of the 2006 Magnuson Act reauthorization?

Dr. LUBCHENCO. Congressman, I am going to ask Eric Schwaab, as the Director of NOAA Fisheries, to respond, please.

Mr. SOUTHERLAND. Sure.

Mr. SCHWAAB. Congressman Southerland, thank you. So, there are obviously as a result of the Magnuson Act reauthorization a number of different constraints that have been imposed upon fisheries.

So I am not sure what the currency would be to count them, but let me just provide a quick summary of what has transpired and a few examples. So there is a requirement that we set under the reauthorized Magnuson Act catch limits and accountability measures for all stocks that were undergoing over-fishing in 2010, and for all stocks at the conclusion of 2011.

There are also requirements that are associated with rebuilding so that those stocks for which a rebuilding was a requirement, there was essentially a number of fish that was below some historical value.

Catch limits have to be set in a way to allow a rebuilding trajectory, in addition to maintaining some sustainable production of the stock at its current level. So there have been a number of tools that have been put in place to achieve those kinds of restrictions, and a number of those relate specifically to, for example, constrained catch limits, thereby allowing seasons to continue.

Mr. SOUTHERLAND. Let me ask you this, because I don't have as much time as you do.

Mr. SCHWAAB. Yes.

Mr. SOUTHERLAND. The science—I know that the stock surveys and the assessments that have been done—and I live in Panama City, Florida, and so I am along the Gulf Coast—regarding the red snapper in the Gulf of Mexico. Do you believe that the red snapper are overfished?

Mr. SCHWAAB. So, red snapper in the Gulf are not overfished now. Overfishing is not occurring. There is a rebuilding plan that is well underway, and that rebuilding process does lead to constrained season lengths.

Mr. SOUTHERLAND. Sure.

Mr. SCHWAAB. That has been the problem that has been most acutely felt by fishermen.

Mr. SOUTHERLAND. But as far as the shrinking of the season, and it is a 60-day season now, and obviously where we are in our geography with storms, and hurricanes, and tropical weather patterns, clearly boats for hire, they are not going to carry a group out 40 or 50 miles with four to five foot seas.

So they have a very small window to be able to make a living in that 60-day period. So if red snapper are not overfished, and if red snapper are 10 or 15 years and older, and you can get your hook to the bottom without hooking up, why would we then not make the necessary movements so that we can give these individuals an opportunity to make a living and perpetuate a family business?

Mr. SCHWAAB. So overfishing has ended. The rate of exploitation has been brought under control. There is a goal of achieving a cer-

tain, and maintaining a certain, abundance level, that without careful management, we could slide back into a situation where either overfishing was occurring, or we were not achieving the abundance.

Mr. SOUTHERLAND. But we clearly have a healthy fishery when it comes to red snapper in the Gulf of Mexico, and so my point is that just because what could happen—and we need to manage, and don't get me wrong, but when are we also equally concerned about the healthy numbers of businesses that are trying to survive?

And I will not even bring in the moratorium due to the oil spill. I mean, is there any good news for these guys who are about to go under and who are not getting 15 percent increases to their budget?

Mr. SCHWAAB. So there was good news last year, and we worked very closely with the council of the—

Mr. SOUTHERLAND. The good news last year was that we had an oil spill, and the fishery was closed down due to that. So that was not really good news along our coast.

Mr. SCHWAAB. So what we did do was work closely—I am sorry, but the good news was certainly not the oil spill, but what we did do is work closely with the council to open up days in the fall, where I think were very much appreciated by fishermen.

Mr. SOUTHERLAND. And how many days was that?

Mr. SCHWAAB. There were a series of, I believe, seven or eight consecutive weekends.

Mr. SOUTHERLAND. Right, and let me tell you just from being there, OK? When school starts in Alabama, Georgia, Tennessee, Mississippi, there is nobody coming down to fish. I mean, I appreciate that, but that was too little, too late, for many of the people.

And these are very dear friends of mine, and families that I have known for an awful long time. My last question. In light of the economic situation that we find ourselves in this country, and the incredible unemployment numbers around the country, the American family budgets and small business budgets are hurting the way they are, how can we justify a 15 percent increase in a budget when the American family is not enjoying that, and has not over the last three or four years?

Dr. LUBCHENCO. Congressman, I think the answer is pretty simple, and that is that the services that we provide at NOAA are vitally important to those businesses, to recovering jobs, and to recovering the economy, and to helping communities.

For example, a number of people have highlighted satellites as being a great big huge part of our budget, which they are, but it is those satellites that provide the information that give the Panama City folks hurricane warnings. So those—

Mr. SOUTHERLAND. Well, quite honestly, Madam, nobody along our coast should die from a hurricane. You know when it comes off the Coast of Africa, you have three weeks to prepare.

So it does not just sneak up on you, but when they are going to foreclose on your house, and your car, and you can't send your kids to college because you closed your family business, and so I appreciate the dollars in the additional satellites, but right now, we are talking about urgent matters for the men and women, hardworking men and women, that cannot make their living in the Gulf.

And I just find that to ask for more money that continues to happen here, and totally be disconnected from the reality of the American hardworking people that are suffering, I think is irresponsible.

Mr. Chairman, I am out of time, and so I cannot even yield you back time because I don't have any.

Dr. FLEMING. I am sorry, but I sort of expected her response.

Dr. LUBCHENCO. I am happy to respond, although I am not sure there really is a response.

Dr. FLEMING. I don't think there is.

Mr. SOUTHERLAND. I release her from having to answer that.

Dr. FLEMING. OK. I thank the gentleman for his questions, and next is Mr. Pierluisi from Puerto Rico.

Mr. PIERLUISI. Thank you, Mr. Chairman. I would like to address my remarks to Dr. Lubchenco. Specifically, I echo the appeal that NOAA reinstate the funding through the Center for Sponsored Coastal Ocean Research in 2012 for the four external coral reef research institutes.

The Caribbean Institute is housed at the University of Puerto Rico, and the research that it sponsors is integral to local management of coral reef resources in the Caribbean.

Without this funding reefs would be placed at unacceptable risks, and the local governments would be without the science needed to make sound scientifically based management decisions. So I echo that.

I am also troubled by the proposed reductions in funding for the coastal zone management grants, and for the National Estuarine Research Reserves, one of which is Jobos Bay located in Puerto Rico.

But my main concern has to do with the tsunami warning centers, and let me explain what I am talking about. NOAA has determined that Puerto Rico and the United States Virgin Islands, along with the four Pacific Coast States, face the greatest tsunami hazard in the United States.

And I am troubled that right now that we only have two tsunami warning centers, and I immediately, with what we have seen in Japan, the first thing that anybody with common sense would think about is what if there is an event like that in the Caribbean.

We have had two events in the past in the Caribbean with terrible loss of life, and the centers that cover us are five thousand miles away. They are the closest one, the one in Alaska.

And so you wonder, and I am not an expert, but you wonder what if something happens in Alaska, and that center is compromised, and then what happens with us? It would be terrible, apart from everything else that a center does.

So my question to you is that I introduced legislation by the way, a bill recently, and it was supported by the Ranking Member Markey to direct NOAA to set up a center in the Caribbean located in Mia West, and minimize the expense. The local government of Puerto Rico would match whatever Federal funding is involved for that purpose.

But I ask you are we—I mean, are you comfortable that we are taken care of the way that this is set up right now? Isn't it justified to have a third center for the Caribbean, where four million American citizens reside?

Dr. LUBCHENCO. The two existing tsunami warning centers operate and provides some redundancy to one another. They also are capable of doing tsunami warnings and models for anyplace, and they don't need to be located in close proximity to where an event happens to do the modeling and to issue a warning.

The critical things are for people in the area to understand what to do when a warning happens, and to have buoys and tide gauges, but especially tide gauges, in an area to give real-time information about the changes that are underway, to complement the seismic information, the earthquake information that goes into the initial modeling.

And so I believe that our current system does serve the people of the Caribbean, Puerto Rico, the Virgin Islands, adequately. It would be the resources—I think that the higher priority is to make sure that as many communities are as what we call tsunami ready.

That they understand what to do when a warning happens, and that they are prepared, and that there are good communication mechanisms, and that is as important, and that can happen without having a physical center in a particular place.

So there are obviously many different elements to having a community be adequately protected, and I think that the priority for the communities that you are concerned about is to make sure that they understand what to do, and that there is good information with tide gauges so that we can understand what is happening.

Mr. PIERLUISI. Thank you. My time is up.

Dr. FLEMING. OK. Thank you. I next recognize Mr. Wittman from Virginia.

Mr. WITTMAN. Thank you, Mr. Chairman, and Dr. Lubchenco, and Mr. Schwaab, thank you so much for joining us today. Dr. Lubchenco, I wanted to begin with you, and start by saying how much I appreciate NOAA's efforts on the Chesapeake Bay restoration.

I think that it is critical that efforts on the Chesapeake Bay are focused on results, and that there is accountability with that particular program, and that we know exactly how many dollars are being spent on that effort across all the different agencies.

I think that is absolutely critical. We talk about jobs and the economy. The Chesapeake Bay is a job engine. It is an economic engine. It has to improve as far as water quality.

We see what that bay produced economically back in the 1950s. I think it is very, very achievable to get it back to that particular state. If you look at the production of seafood in that basin, just seafood, just that production, and not the recreational element, a tremendous economic impact. We need to be back there.

And I wanted to ask you that in NOAA's Fiscal Year 2012 budget projections, can you tell me what in that budget will emphasize the restoration of the Chesapeake Bay, and what elements of that budget will put in place the goals and objectives of Executive Order 13508?

Dr. LUBCHENCO. Congressman, thank you for recognizing those efforts. As you obviously know well, this is an interagency effort, and NOAA plays a supporting, but not a leading, role in this.

There is \$5 million in our Fiscal Year 2012 request in support of the Chesapeake Bay, and that research would go to improving

the quality of the research, new technologies and infrastructure, field and lab equipment, for example, to enable us to better measure and track what is happening.

There is support for the proposed oyster restorations, which is vitally important, and those are anticipated down the road. We have a key role in providing information to decide where, and how, and exactly when that will happen.

So that is what is in our budget this year, our budget request, and I am very hopeful that we can deliver on that because it is vitally important for all the reasons that you articulate.

Mr. WITTMAN. Absolutely. Well, I want to make sure that there is accountability there. My concern in the past is on tsunami projects, and I will give you an example. In the oyster restoration program, oysters were put down, and Cownose Rays came and ate them up like potato chips.

We spent a lot of money there, and I want to make sure that we don't repeat those mistakes of the past, and that was a joint project with the Corps of Engineers. I want to make sure that again there is accountability there.

Resource restoration has a direct economic impact, but for our waterman, and then if you look at resources, as far as fin fish, and what that helps commercially, also recreationally.

Those, I think, need to be the emphasis of the dollars that are spent. We today can't afford to do the niceties. We have to do the necessities, and the necessities are to get that by to be a more productive body of water to make sure that it has an increased economic impact.

So I appreciate what you represent there. Mr. Schwaab, I want to move to you and something directly associated with that, is Atlantic sturgeon. We all know the potential that comes up with the evaluation for an Endangered Species listing for Atlantic sturgeon.

Anybody that fishes in the bay knows that potentially that could be catastrophic across the entire bay as far as the harvest of all kinds of other fin fish. We all know that the sturgeon come up the bay, and they spawn, but they also can be incidental catch on any gear that is out there.

So I appreciate you extending the public comment period for the potential listing of Atlantic sturgeon, but I also wanted to encourage you that through that evaluation process that you take the time to carefully consider every comment that you will get from folks up and down the bay, because we all know that is absolutely critical.

We know that we ought to be protecting all of our species, but we have to look, too, with interspecies relationships, and then also be realistic. As you have heard Mr. Southerland say, there is an economic impact with all these fishery management decisions.

We want to make sure that the agency is mindful of that, and that that is reflected in those decisions. So I would like to get your comment on where we are with the Atlantic sturgeon evaluation of the ESA listing?

Mr. SCHWAAB. Yes, sir, Mr. Wittman. Thank you. We were pleased to work with you, and to honor your request to extend the comment period. I do know that during that comment period that

we did receive additional comment from Natural Resources officials in Virginia.

That comment period is now closed. Those comments will be given full and absolute consideration. We are on a track that would result in a listing recommendation by the fall, later on in the fall of this year, at which point obviously there will be additional opportunities for discussion.

Mr. WITTMAN. Thank you, Mr. Chairman.

Dr. FLEMING. The gentleman's time is up. I next recognize Mr. Markey.

Mr. MARKEY. Thank you, Mr. Chairman, very much. Thank you for being here. I very much appreciate it. If I were to stop one of my constituents in Medford Square and ask them what is the National Oceanic and Atmospheric Administration, I would probably get blank stares.

NOAA is an agency that few in the public could correctly identify, but that is critical to keeping them safe and our economy running smoothly. Just this morning, they issued an alert for a massive storm barreling in to Boston later on tonight.

This warning will allow people and businesses to prepare for an unbelievably huge storm here in April, and one that might push Boston's winter snowfall this year above Shaq O'Neal, and we are using him as a Shaq-O-Meter this winter.

So we will use his height, and we are about to break the all time record. So I want to start with a question about satellites, which I understand has been a point of discussion here today.

The Administration has requested about \$1 billion in Fiscal Year 2012 to fund the joint polar satellite system to replace our aging weather and climate satellites.

The National Weather Service recently reran the weather predictions for the 2010 Snowmageddon event without using NOAA polar satellite data, and found the impact to the accuracy of the weather forecasts was substantial, including forecasting less snow by at least 10 inches.

Can you please describe the consequences if these funding levels for satellites are not met?

Dr. LUBCHENCO. Congressman Markey, thank you for focusing on an area that is vitally important not only to NOAA, but to the country. The weather information that that we receive that is provided by the National Weather Service comes from two types of satellites; one of the geostationary satellites that sits way high above the earth, and stay in one place, and the others—and that provides our short term weather information.

The longer term forecasts, the severe storm warnings, are provided by a different type of satellite, the polar orbiting satellites, and this program, the joint polar satellite system, is vitally important to replace the current satellite that is up there now, and the one that we intend to launch in the fall.

Each of those has a finite life span, and it is very important that this year we continue to construct the instrument and the satellites for launch in a number of years to minimize the gap in coverage.

Currently, because of the continuing resolution for Fiscal Year 2011, we are already likely to experience a gap of between 12 and

18 months at the minimum, where we will not have the ability to do the severe storm warnings at the quality that we do today.

Mr. MARKEY. Thank you, and we have to make sure that funding is there. Two weeks ago, I, along with my colleagues, Congressmen Frank, Keating and Tierney, sent a letter to Secretary Locke urging him to coordinate with the Departments of Treasury, Labor, Housing, and Urban Development, and the Small Business Administration, to assess and evaluate all options to provide assistance to Massachusetts' fishing communities negatively impacted by the transition to a new fisheries management plan.

Can you update us on what steps have been taken to address our request?

Dr. LUBCHENCO. Congressman, if I may, Eric, would you comment on that, please.

Mr. SCHWAAB. Yes, thank you, Congressman. Yesterday, the Secretary announced the deployment of economic assessment teams under the leadership of the Economic Development Administration into six ports across New England, including New Bedford and Gloucester.

Those teams will work very closely with local officials to address some of the transition challenges associated with not only current fishing regulation, but some of the ancillary challenges that they face in trying to maintain working waterfronts in current economies.

Mr. MARKEY. Thank you. I have one final question here. Senators Kennedy and Saltonstall in 1954 authored legislation to use money from tariffs on imported seafood products to fund programs to promote the health of domestic fisheries.

Currently the majority of that fund are transferred to NOAA's operations, research, and facilities account, reducing the funds available for fishing industry projects. Could you give me an update on what programs are using the Saltonstall and Kennedy funds, and how they are promoting the health of domestic fisheries?

Mr. SCHWAAB. Yes, sir, and just by way of additional background, beginning in 1979, and through 1985, Congress enacted a transfer from the promote and development account to the operations, research, and facilities account within NOAA.

Beginning in Fiscal Year 1986, the Administration also began to include that transfer to that same account as a part of its budget request. These funds essentially come off of the top of that account, and so they support a wide range of programs within NOAA fisheries that are supporting that.

Mr. MARKEY. Could you give a report to the Committee on what that funding is used for in writing?

Mr. SCHWAAB. Yes, sir, we can.

Mr. MARKEY. Thank you, and thank you, Mr. Chairman.

Dr. FLEMING. I thank the gentleman, as his time has expired. Dr. Harris is recognized.

Dr. HARRIS. Thank you very much, Mr. Chairman. Dr. Lubchenco, good to see you again. The last time I saw you, it was at Science and Technology, and since we spoke with you then, and asked you some questions, I actually have had a chance—and one nice thing about our schedule is that we actually get to go out once

a month, and get outside the Beltway for a week and actually talk to people.

I could not convince them of the popularity of catch shares. I just could not convince my local recreational fishermen or my commercial fishermen. So maybe you have different folks that you all talk to.

Mr. Chairman, I would like to enter into the record the vote from the amendment to the continuing resolution that dealt with catch shares, and if we could include that just to show that it may be popular somewhere, but it is not even popular on the Floor of the House apparently, the catch share program.

And let me just ask a couple of questions. One is about the sea bass, the Black sea bass in the Mid-Atlantic. Now, my understanding is that—and, Mr. Schwaab, maybe you are the one to ask, but it is currently not overfished, but yet it is facing a closure.

Is this because we are awaiting new data, and is it true that the data that we are basing that on is not 9-year-old data?

Mr. SCHWAAB. Dr. Harris, the situation with respect to Black sea bass is not dissimilar to the one that we discussed in the Gulf with respect to red snapper. Overfishing has ended and there is a rebuilding plan that is underway, and requirements to manage the fishing rates, and to essentially maintain a certain stock size over time.

And the fishing effort has the potential to substantially outstrip the productive capacity of that stock. So while we have a substantially healthier Black sea bass population in the Mid-Atlantic than we have had for a long time, the ability of the fishermen to essentially fish that stock so hard to lead to backsliding does lead to continued requirements to manage seasons, and to put into place accountability measures that should those catch rates exceed articulated catch limit levels, or established catch limit levels, that seasons can then be modified to bring that into account.

I do not believe as I sit here that that is based on a 9-year-old assessment, but I would have to get back to you with the specific data with respect to that.

Dr. HARRIS. All right. I would appreciate that, because obviously as you know, our experience with the blue crab population is that it can fluctuate greatly, and if we are dealing even with 3-year-old blue crab data in the bay, we would have had a lot of fishermen out of jobs.

And we are supposed to care about jobs, and the recreational fishing industry is a huge job creator in the bay as it is for my colleague here from Florida, I am sure. Let me just ask about the scallops.

The catch share for the scallops, as some of my commercial fishermen have said, that when you initiate these catch shares, what happens is that kind of the big guys then with all the big boats end up buying the licenses, because that is really what they are, and can in fact because of those techniques actually strip the bottoms in fairly large areas, because these are large boats fishing over small areas.

So it really does change the nature of the fishery. Is that true, Dr. Lubchenco? Are they telling me the truth there, that it does change when you change a fishery from one with a group of large

boats, to one with a lot of small boats, and it changes the fishery, like the scallops?

Dr. LUBCHENCO. Congressman, I will let Eric respond to scallops specifically, but just as general comment, let me say two things. One is that NOAA does not impose catch share programs on anybody.

The fishery management councils choose if a catch share is an appropriate management tool for them for a particular fishery. So just to clarify that, and a catch share program needs to be well designed, and you can design it so that the big guys cannot buy out all the little guys.

That is a design element that we believe should be included in the design part of the program.

Dr. HARRIS. All right. Thank you. Let me just follow up a little bit about that with these catch shares, because obviously NOAA must have something to do with it, because that is where we went into the budget to try to stop it.

What happens when a fisherman retires, and when they decide that they don't want to do it anymore? My understanding is that license, that catch share, is kind of for sale. They can sell it to someone; is that correct?

So the government is creating something that in the end that you can really never take away, because that fisherman will feel that that is their possession. So what is the rush, because my understanding is that with increased funding that there would be a whole lot of new catch share programs probably initiated.

So what is the rush to create a program that is so hard to reverse, if it could be reversed ever because of the value that you create when you give someone—I mean, it is like the ultimate license. I am an anesthesiologist, and if I had a license to anesthetize a certain number of people in a year, and I could sell that to someone, or conversely if I take a few years off and don't anesthetize as many people as I am doing right now, when I go back to do it, I would have to buy a license from someone to anesthetize people.

But that is the equivalent of what we are doing. So what is the rush since we are creating something that is of permanent value that would be so hard to take away if like the plan did not work out?

Mr. SCHWAAB. Thank you, Dr. Harris. I think that it is important to recognize that expressly by statute these are not permanent rights. These are privileges that are conveyed.

The only distinction between the privileges that are conveyed in the case of catch shares versus those that are conveyed through some other management system, is that they are more narrowly a share of an annual catch limit, the privilege to catch a share of an annual catch limit is conveyed to an individual, or groups of individuals.

So the privilege is to fish in other fisheries under other systems, like a days at sea system, that exist in a number of these fisheries prior to the imposition of catch shares, is transferrable as a license in the same way that a permit, or a privilege, under a catch share system would be transferrable.

Dr. HARRIS. Well, thank you, Mr. Chairman. I am out of time, but I will be submitting additional questions. Thank you.

Dr. FLEMING. The gentleman's time is up. Let us see. Mr. Duncan from South Carolina, you are now recognized.

Mr. DUNCAN. Thank you, Mr. Chairman, and Mr. Schwaab, thanks for being here today. As you may or may not know, no Shortnose sturgeon have been detected in the upper Watery River in South Carolina at least since 1896.

1896, which was before the Catawba Waterway Dams were actually built, which was in 1904. Yet, as a part of the hydro relicensing process, the NMFS has indicated that the dams are actually impinging the ability of the shortnose sturgeon to move up the river, and is looking to require the licensee to either construct fish passages on all the dams, or remove them entirely.

This is unfortunate, because it seems that all the stakeholders were working together to reach a satisfactory and sustainable agreement on relicensing issues, and then suddenly the regional office of NMFS backtracks, and overrules the local NMFS office.

And instead of a balanced and pragmatic decision on resource allocation, we have a stalemate that could include environmental litigation if recommendations are not put into the final relicensing permit.

And this is a total 180-degree shift from what FERC included in its environmental impact statement for the project, which has an agreement from the local NMFS office, and the relevant State, local, and industrial, and environmental stakeholders.

FERC's recommendation was to reserve its right to reopen the license if and when a shortnose sturgeon were detected in the river, and everyone, including the licensee, agreed to that as the best solution.

The fact is that NMFS wants to increase the cost of the project to protect a fish that has not been within 70 miles of the dams in over 100 years. So my question is simple. What new data are you using to justify this decision that anything short of fish passages or total dam removal are unacceptable?

And am I correct, but didn't NMFS issue a draft report on shortnose sturgeon last year for another project in South Carolina where RDR, as well as FERC, took exception to some of the conclusions, and basically said it lacked credibility?

From what I understand the fish are actually around that dam, and so I will just let you address that, please, shortly.

Mr. SCHWAAB. Yes, sir, Mr. Duncan. Thank you. I do know that we have issued preliminary and modified prescriptions for fish passage under the Federal Power Act. So there is essentially a draft biological opinion that has been issued.

There has not yet at this point been a final biological opinion that has been issued to FERC under this project proposal. I do know that FERC is anxious to have that final biological opinion expeditiously so that they can move forward with the process.

As to some of your references as to the historical reports, honestly, I can't speak to them as I sit here today.

Mr. DUNCAN. If you want to take a historical approach, I can go back over a hundred years and tell you that there has not been a sturgeon seen in that river, and I think it is ludicrous.

And this is what the American people get frustrated with our government when it is very obvious to the common man out there

that shortnose sturgeon aren't anywhere near this project, but you are going to hold it up in costs, and rate payers in South Carolina and North Carolina that benefit from the hydroelectric project, you are going to cost them money because it is going to trickle down through costs of litigation, and it is just wrong.

So I will just leave it there, and I want to ask Ms. Lubchenco this. NOAA has prided itself on the work that they do, and the budget increase that they have requested, and I hate to be the bearer of bad news to you, Ma'am, but we are \$14 trillion in debt, and we are running a \$1.6 trillion deficit this year.

Unemployment remains far too high in this country, and definitely in South Carolina, where I come from. We cannot accommodate your budget request, especially when these requests will be used to prove that global warming is going to kill us all, polar bears included.

This request comes despite the fact that the so-called man-made global warming alarmists have been thoroughly discredited with the e-mails scandal, fake data, and yet here we are at a budget hearing, where you are asking for more money.

The Nation is broke. We cannot afford to be wasting money on improperly orders of priorities like global warming studies. You really want us to out-educate, out-build, out-innovate our competitors when we are imposing these kinds of restrictions on them through the global warming criteria? I don't think you do.

So if you really wanted to create jobs, you would have abandoned these global warming fairy tales and shifted your efforts to ending the drilling moratorium in the Gulf of Mexico. Our economy is in the tank, Madam, instead of gasoline in our tanks.

So let us focus here on actually putting Americans back to work. It is time to get serious, Mr. Chairman, and I appreciate them coming for their budget request, but the American people expect better of us. Thank you.

Dr. FLEMING. The gentleman yields back his time. I now recognize Mr. Pallone from New Jersey.

Mr. PALLONE. Thank you, Mr. Chairman, and I apologize for coming in so late and missing everything, but I did want to be here because I am very concerned about this catch share program.

And I noticed when I came in and there were some other Members asking about it, and so I hope that is not repetitive, but I wanted to ask Dr. Lubchenco, and also Mr. Schwaab, with regard to NOAA's Fiscal Year 2012 budget request, it reallocates more than \$6 million from cooperative research, and \$11.4 million from the fisheries research and management program to the national catch share program.

I am confident that work for the Partnership for Mid-Atlantic Fishery Statistics that is occurring in my district and along the Mid-Atlantic is a glowing example of the success of cooperative research.

However, NMFS does not support the Partnership for Mid-Atlantic Fishery Statistics. It was funded through an earmark, which we know how is no longer possible unfortunately.

So I wanted to know how does NOAA intend to ensure that cooperative research continues to continue to improving fisheries man-

agement when it is being cut by more than \$6 million? I would ask each of you.

Dr. LUBCHENCO. Congressman, I would like Eric to respond to that if I may, please. Thank you.

Mr. PALLONE. Sure.

Mr. SCHWAAB. Congressman, thank you. We did speak a little to this point earlier. The shift that occurred from the cooperative research line into the catch share line reflects less a change in the function or purpose of that money, and more the fact that with catch share systems there are at-sea observers and dockside monitor costs that do generate cooperative related data that feed into the management systems.

Mr. PALLONE. But my problem is that NOAA's national catch share policies explicitly states that NOAA does not advocate the use of individual private anglers or catch shares. Now, my district has thousands of private anglers, and attracts individual anglers from all over the Nation.

And these anglers support local small businesses, and drives the coastal economy. By placing cooperative research funds under catch shares, which my understanding by your own policy is not recommended for my district, I think you are putting pressure on the Mid-Atlantic Regional Fisheries Management Council and other regional management councils, to adopt catch shares to get at that funding.

And, of course, I have said this over and over again, and it is not just me that is saying it. My fishermen are saying it as well. So how do you propose that we help the recreational fishing communities gain confidence in the data collection of fisheries management when you are moving essentially one confidence builder out of their reach?

I mean, you understand that they have very little faith in the management programs—I was going to say schemes, but I guess I should watch my language—because they just think that the data is not accurate.

And they have been spending their own money literally to try to get more accurate data. So I just don't know how you are going to gain their confidence in the data collection of fisheries management when you are making this move that you are saying. That is my problem.

Mr. SCHWAAB. Thank you, Mr. Pallone. Let me make a couple of other additional comments. One, that this budget also reflects a proposed increase for the marine recreational information program that gets much more directly at some of the catch and effort data associated with recreational fisheries.

Second, I would just note that while—that the preponderance—most of the catch here, if not all of the catch here, are in programs that have been implemented, and have been implemented for the commercial side of fisheries.

So in the case where you have a mixed sector fishery with recreational fishermen catching a share of the quota, and commercial fishermen catching a separate share of the quota, placing commercial fishermen under a catch share system has been shown to yield benefits in accountability to total allowable catches, and invest them in—

Mr. PALLONE. Well, let me ask you this. What about what I said? I will let you respond, and I know that I am almost out of time, but they all tell me, and I think that you are putting pressure on the Mid-Atlantic Council, to adopt catch shares to get at this funding that you now say that has been moved over for cooperative research. So what is your response to that?

Mr. SCHWAAB. So the bulk of this funding, that is, this increase, is actually proposed to support the Pacific troll individual quota program, which was developed after seven years of work by the Pacific Fishery Management Council.

Mr. PALLONE. So they are not going to get the money anyway in the Mid-Atlantic; is that what you are saying?

Mr. SCHWAAB. No, what I am saying is—what I am trying to say is that we are not creating an economic incentive whereby the only place to go to secure appropriate funding is in the catch share programs.

There are catch share funds to support programs that have been adopted. There are opportunities for additional programs, but there are also significant other opportunities in there.

Mr. PALLONE. But it seems to me that they have been severely limited then by switching this over and cutting it, and you are going to limit the opportunities. But thank you anyway. Thank you, Mr. Chairman.

Dr. FLEMING. Thank you, sir. The gentleman's time is up. Thank you. Well, we have had such an enjoyable time that we have decided that we would like to stay for another round. Are you up for it today, witnesses?

Dr. LUBCHENCO. We are here at your pleasure, sir.

Dr. FLEMING. OK. Thank you. I will recognize myself for five minutes, and I want to come back to something that I brought up earlier about this idea of surveys and assessments.

Is it fair to say that if stock surveys and assessments are not done in a timely manner by your agency, fishermen pay the price because of the scientists and managers having to build several layers of precaution into the models in order to set harvest levels?

Mr. SCHWAAB. Yes, sir, it is fair to say that if stock assessments are not done in a timely fashion, there is additional precaution that is built into the management.

Dr. FLEMING. And would you acknowledge that that has an economic impact, certainly to the commercial fishermen out there who have a smaller and smaller window if you will of fishing opportunities?

Mr. SCHWAAB. So certainly that can have, and in many cases does have, an economic impact, yes, sir.

Dr. FLEMING. OK. Thank you. Is it fair to say that multiple layers of precaution may be built into a single fisheries harvest level?

Mr. SCHWAAB. The two general types of precaution that are built into most of these catch limits and accountability measures are management uncertainty, which is generally a small part of whatever precaution buffer might be included, and then scientific uncertainty, which is based on the best advice of the collection of scientists that contribute to the stock assessment.

Dr. FLEMING. OK. Now, I understand that the NOAA fleet will be able to spend about half of the amount of time in Fiscal year 2011 as it did in Fiscal Year 2010 for fisheries stock assessments.

Now, I heard you earlier testify—and I forget the numbers exactly—that you have plans by, I think, Fiscal Year 2016 or 2015, to close significantly the gap. So, explain this to me, because we are actually seeing that there will be less time for the fleet, and yet we are going to do more surveys or do catch up of surveys?

Mr. SCHWAAB. Yes, sir. So there are reductions in fleet days available to us as result of a variety of budget and operational circumstances. The Fisheries Service does contribute additional funds to essentially purchase back some additional days at sea.

Further, the fleet, at least as it supports the Fisheries Service, provides a platform for a number of surveys and work that goes beyond those specific to the support of stock assessment.

And as an agency, we do, as we look ahead, prioritize meeting some of those basic stock assessment requirements above some of those other surveys that will be experiencing even deeper cuts as a result.

Dr. FLEMING. What I am trying to understand though is that if you have less fleet days, and yet you feel that you are going to actually catch up on the surveys, how do you recognize that?

It would seem to me that it would go just the other direction. What compensates for those fewer days at sea?

Mr. SCHWAAB. Well, first of all, just to emphasize what I said a moment ago, which is that the proportional shift downward associated with fisheries stock assessment related surveys, is less than that which is reflected across the fleet.

In addition, I would say that we also work from a number of other platforms through cooperative research, and through contract of commercial vessels, to provide important survey platforms that have helped us to maintain as close as we can the trajectory that we are on.

Dr. FLEMING. How do you set that priority in terms of fisheries? Who gets the attention first?

Mr. SCHWAAB. Well, there are a number of factors that we employ there, but obviously some of those relate to the importance to fisheries around the country, and their relative value.

There are other factors that do come into play there, such as volatility, and other biological judgments made primarily by our scientists.

Dr. FLEMING. Some of the data is as old as 10 years, and so are you putting that at a priority as well, going back to those that are maybe the most overdue?

Mr. SCHWAAB. Yes, sir. Within the—well, obviously there are some stocks for which we lack any kind of significant data, and its relative importance that has placed them in that position.

So clearly length of time since the last assessment is a factor, but it is not necessarily the—it certainly is not the only, and not even necessarily the dominant factor.

Dr. FLEMING. OK. My time is up. I now recognize Mr. Sablan, the Ranking Member.

Mr. SABLAN. Thank you very much, Mr. Chairman. Mr. Chairman, I would like to ask for unanimous consent to enter into the

record a statement supporting the Fiscal Year 2012 request for fisheries data collection and monitoring submitted by the Pure Environmental Group.

Dr. FLEMING. Without objection, so ordered.

Mr. SABLON. Thank you very much, Mr. Chairman. Mr. Schwaab, what are the economic benefits of rebuilding fisheries in Fiscal Year 2012 and beyond?

Mr. SCHWAAB. Thank you, sir. So we estimate that if we rebuild currently the estimated dockside value of domestic fisheries to be about \$4.1 billion.

Our economists estimate that if we rebuild all stocks to the desired level that we could increase that number by approximately 50 percent, up over \$6 billion in dockside value, and obviously spinoff values associated with economic productivity and jobs.

Mr. SABLON. And you have also recently said that we are turning the corner with regard to measures in place for overfishing in United States waters in 2011. So would we be at this point if Congress had decided not to fund the key fisheries programs, including stock assessments, of service cooperative research, and surveying and monitoring projects?

And what would the impact on ending overfishing be if funding levels in H.R. 1 were enacted?

Mr. SCHWAAB. So the corner that we are turning—and thank you, sir—is that by the end of 2011, under requirements prescribed by the Magnuson Act, we will have in place catch limits and accountability measures to assure that overfishing is not occurring in Federally managed stocks.

That obviously also then include placing us on the trajectory to rebuilding to the kind of benefits that I described moments ago. If we are in a position where over time we lack the ability to conduct appropriate science to maintain that course, there is, of course, the prospect of backsliding.

There is, of course, also the other eventuality that we spoke of a few moments ago, and that is increased scientific uncertainty buffers that would undermine total quotas.

Mr. SABLON. All right. Thank you. Dr. Lubchenco, six of the nine regions identified in the National Oceanic policy have established regional ocean partnerships. The remaining three, including the Pacific Territories, do not have such partnerships. Are there plans to extend these regional partnerships to the Pacific Territories?

Dr. LUBCHENCO. I believe that it is appropriate to have a dialogue with the Pacific region to identify what would be in the best interests, and would be supported by that region.

One of the principles of the regional planning program is to enable a bottom up approach, and to really empower local communities, States, and territories, to participate actively in comprehensive planning for their regions.

And the model that was envisioned works appropriately for States that have Governors alliances in place already, but where those don't, I think that a dialogue with the region is certain appropriate to see how to best meet those needs.

Mr. SABLON. All right. And so how does NOAA funding requests for regional ocean partnerships and coastal and marine spatial

planning represent an effective and efficient use of yearly budgeted funds?

Dr. LUBCHENCO. The Fiscal Year 2012 budget includes requests for \$20 million for regional planning grants that would be awarded on a competitive basis to different regions, and I can tell you that there is keen interest on the part of many, many regions in having that assistance, and in doing that planning.

The additional \$6.7 million, I believe it is, is in support of providing information, including integration of data, which will benefit all regions so that there is information that is available to do planning.

Mr. SABLAN. Thank you very much, and my time is up.

Dr. FLEMING. OK. I thank you. Mr. Southerland, you have five minutes.

Mr. SOUTHERLAND. Thank you, Mr. Chairman. Mr. Schwaab, I want to ask you that if many fisheries may not have updated stock assessments for up to five years, is it fair to assume that the measures to stop overfishing are not successful until the new stock assessments are completed?

Mr. SCHWAAB. So we would have catch limits and accountability measures in place, but we would not actually be able to verify the end of overfishing until the next stock assessment.

Mr. SOUTHERLAND. And the reason that I asked that question, and I think you may have touched on that on a previous questioner, but I think you stated, and I just wanted to get a verification that obviously if that is the case, and we won't know for five years if we don't have the data, that it unfairly penalizes fishermen.

It could unfairly penalize those fishermen for that year period while we are waiting for new data.

Mr. SOUTHERLAND. So clearly more frequent and more accurate data is to everybody's benefit?

Mr. SCHWAAB. Absolutely. I mean, we are in agreement there.

Mr. SOUTHERLAND. OK. Where in the budget are you addressing NOAA's current inability to give management councils this socioeconomic data that they are statutorily obligated to consider when making fisheries management decisions?

Mr. SCHWAAB. So we do have within our regions economists and socioscientists that do support the councils in pursuit of that data, and those would be reflected in the overall sort of management and assessment portion of the budget.

Mr. SOUTHERLAND. Well, it seems to me, and again I am just learning this process, but it seems to me that obviously the fisheries have to have this data that they get from you, and they have a statutory obligation.

And yet I see in the budget that we are shifting, and there is the increase—and Dr. Lubchenco, you can even address this as well, but the increase in the satellite that was about \$700 million, and where you want that to go.

And then of course the climate services. So if we have the pressure that the fisheries have the statutory requirement to have good data in order to make their management decisions, and there is a problem because we don't have the data, and we all agree that we don't have the current data that would be best, then why are we

diverting monies into other areas, and moving in other areas, when there is a statutory violation because they don't have the data that is needed?

I mean, what is the justification to continue pushing money in areas when there is statutory violations being incurred because they can't make good decisions because they don't have the data that you provide?

Dr. LUBCHENCO. Congressman Southerland, the current process involves providing councils with economic information when they are in the process of putting together a fishery management plan.

That is part of the routine process. We do that and we will continue to do that. The request in the budget for an increase of \$15 million for stock assessments is to go out and get additional information about many of those stocks for which we would all like to have more current information.

So we are not doing the trade-off that you are suggesting. I think that there is interest in having more money in every part of our budget, and we have done the best balancing and juggling that we can, which is why you see a strong emphasis on more money for stock assessments, because that is a bottleneck that is a critically important aspect to being able to know how well we are doing, and to be able to manage appropriately.

Mr. SOUTHERLAND. Well, since this focuses on—I mean, since this affects so many jobs, why would we not take—when you say that you have that request of \$15 million, why would we not take that \$15 million out of that \$346 million that you want to use to create a new line item under climate services?

I mean, there is money there, and why would we not—we know that we have an issue, and we know that we have a problem with data. Why would you not take \$15 million that you have already got, or that clearly has been in the budget in other line areas, and address that need?

Dr. LUBCHENCO. Congressman, let me clarify that the proposal to create the climate services budget neutral, and so we are taking individuals, and labs that are currently in one place and just putting them together in another place.

Not physically, but in terms of the organization. So that does not incur additional funds. The request for additional money for stock assessments is in fact a reflection of its importance.

Mr. SOUTHERLAND. When you do—and this is kind of a different direction, but when you do this and you create a climate services whole another division, does that require Congressional authority?

Dr. LUBCHENCO. It does require congressional approval, but not necessarily legislation. But the budget request is included in the President's budget request to Congress as part of our package, and is to do this budget neutral reorganization.

We currently provide climate services. We provide long term weather forecasts. I should clarify that anything that is longer than about four—I am sorry, two weeks, is considered climate in the way that we typically think of it.

And so information about what is happening a few months down the road, or next year, is climate information, whether it is an El Nino year, or La Nina year. So we currently provide climate serv-

ices, which is information about the future for planning purposes for farmers, for fishery managers, for others.

And the climate service reorganization is intended to make it possible to do that more effectively and more efficiently.

Mr. SOUTHERLAND. Thank you, Mr. Chairman.

Dr. FLEMING. I thank the gentleman. Let us see. Ms. Hanabusa from Hawaii. Five minutes.

Ms. HANABUSA. Thank you, Mr. Chairman. My questions are for Mr. Schwaab. Mr. Schwaab, as I understood your testimony, you said that the actual catch shares are established by the various regional fisheries, but it is based on information or data that you provide. Am I understanding that correctly?

Mr. SCHWAAB. Thank you, Congresswoman. So the catch limits are set based upon science that is provided from surveys that come from a variety of different sources, and then those data come together in a stock assessment process for again scientists to review that data, and make assessments around the status of the stock, and its capacity to produce a certain number of fish sustainable.

And so those are catch limits that are then adopted by the councils as a part of the fishery management planning process. The concept of catch shares is a management system which is a particular type of management system separate from the setting of catch limits and quotas.

Ms. HANABUSA. So do you participate in any one of those processes, whether it is the catch share or the catch limits?

Mr. SCHWAAB. So we in each of our regions have science centers, and regional offices, that work very closely with the fishery management councils, both in collecting and analyzing the science on which catch limits are set.

And then we also work with the management programs that are recommended by the councils in a rulemaking process that the agency develops and adopts them.

Ms. HANABUSA. Is the reason why we are seeing the transfer of funds is because your science needs to be augmented or updated?

Mr. SCHWAAB. OK. So catch shares and the funds that have been the subject of a number of questions here, is a particular type of management approach. Traditionally, most of the fisheries are managed based upon essentially input controls; how many days at sea a fisherman can spend, and things like that.

And they are generally applied in aggregate to a fishery. So all of the fishermen go out and fish against a common quota under certain umbrella rules. That leads to a number of sometimes unfortunate outcomes, like derby fishing, where all the fishermen go out together, and catch as many fish as they can, and as quickly as they can, and bring them back to dock, lessening their market value through increasing capture costs, and increasing risk of bad weather implications and that sort of thing.

What a catch share based program does is that based upon a total allowable catch, assigns the privileges to catch a portion of that catch to a specific fisherman or group of fishermen.

And there they are given more freedom to go out and catch the fish when and how they want. It provides them increased market opportunity, and it provides them increased business flexibility.

And it also provides them the opportunity, for example, pursue fishing practices that minimize the catch of unwanted catch by catch and those kinds of things. There are a lot of positives to catch share based programs in the management system.

Ms. HANABUSA. But does that also permit them to transfer those rights? In other words, can they then sell those rights?

Mr. SCHWAAB. So as with many of the management programs, catch share or a days at sea permit, or anything like that, there are provisions that allow for the transfer of permits.

Now, these permits all have underlying them only privileges and not perpetual rights to catch a certain amount of fish, and that is the same for the catch share program as it is for any of another commercial management—

Ms. HANABUSA. But for a given year, for example, would one entity be able to then transfer their rights, or sell their rights, to another for that specific season, or that specific—whatever that right is good for?

Mr. SCHWAAB. Yes. Most of the programs, and they are all designed differently because they are designed by the councils based upon the needs of the local fishery, but most of them provide for some kind of a transfer of quota system.

Ms. HANABUSA. Thank you very much.

Mr. SCHWAAB. Thank you.

Dr. FLEMING. Well, that completes two complete rounds, and so I would like to say today thank you, and congratulations to Dr. Lubchenco, and Mr. Schwaab, for your testimony today.

It has been very informative, and very responsive, and we do thank you for that. The Subcommittee may have additional questions for the witnesses, and we ask you to respond to these in writing.

The hearing record will be open for 10 days to receive these responses. If there is no further business, without objection, the Subcommittee stands adjourned.

[Whereupon, at 4:40 p.m., the Subcommittee was adjourned.]

[Additional material submitted for the record follows:]

[The prepared statement of Mr. Markey follows:]

**Statement of The Honorable Edward J. Markey, a Representative
in Congress from the State of Massachusetts**

Thank you, Mr. Chairman. If I were to stop one of my constituents in Medford Square and ask them what is the National Oceanic and Atmospheric Administration (NOAA), I would probably get blank stares. NOAA is an agency that few in the public could correctly identify but that is critical to keeping them safe and our economy running smoothly. Just this morning they issued an alert for a massive storm barreling its way to New England. This warning will allow people and business to prepare for another severe storm and one that may push Boston's winter snow fall this year above Shaq on the Shaq-O-Meter.

Recognizing the critical role that NOAA plays across our economy, the Administration has requested \$5.5 billion for 2012, an increase of \$749.3 million from the enacted level for Fiscal Year 2010. Despite these fiscally austere times, NOAA has proposed \$43 million for Fisheries Research and Management to provide accurate and timely information and analysis on fish stocks; \$27 million for regional ocean partnership grants and coastal and marine spatial planning to decrease costs and delays and provide planning certainty for ocean-related industries; and a budget-neutral reorganization to stand-up a Climate Service to provide relevant, reliable, and timely information for managers, businesses, and all citizens to make decisions in the face of climate change.

These forward-looking initiatives stand in stark contrast to H.R. 1, which recklessly cut almost \$400 million from the 2010 enacted level for NOAA and would prevent the reorganization to create a Climate Service. From tsunamis to hurricanes to oil spills, NOAA has been on the front lines of disaster response, and slashing funding will cut the life-saving services that this agency provides to every congressional district. I commend the Administration for proposing a budget that makes strategic choices to support our ability to prepare for disasters, to protect our coastal resources and communities, and to provide necessary climate products and services needed by all Americans.

[A statement submitted for the record by Lee R. Crockett, Director of Federal Fisheries Policy, Pew Environment, follows:]

**Statement submitted for the record by Lee R. Crockett,
Director of Federal Fisheries Policy, Pew Environment Group**

The Pew Environment Group (PEG) appreciates the opportunity to provide a statement for the record on the National Oceanic and Atmospheric Administration (NOAA) FY 2012 budget request, particularly as it relates to the implementation of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the law that has governed management of America's ocean fish since 1976.

The Pew Environment Group (PEG) offers qualified support for the President's FY 2012 budget request of \$346.3 million for data collection and analysis programs at the National Marine Fisheries Service (NMFS). We are concerned that this request does not provide the long-term funding needed to maintain sustainable fisheries. Therefore, we consider it the minimum necessary to keep our fisheries on the road to recovery.

In the nearly 35 years since the MSA was enacted, it has enjoyed strong bipartisan support, including the most recent 2006 reauthorization, which was sponsored by the late Senator Ted Stevens and signed into law by President George W. Bush. The MSA provides the tools to sustainably manage ocean fish, one of America's most valuable natural resources. Healthy fish populations are the backbone of America's commercial and recreational saltwater fishing industries, which according to NMFS generated \$163 billion in sales impacts and supported nearly 1.9 million full and part-time jobs in 2008 alone.¹ Ocean fish conservation is good for fishermen, America's economy and the environment. For this reason, diverse stakeholders including commercial fishermen, recreational anglers and environmental groups are united in advocating for data collection and analysis appropriations.

Relatively modest federal investments in fisheries data and analysis in FY 2012 will help deliver over time billions of dollars in economic benefits and hundreds of thousands of jobs for U.S. taxpayers. PEG urges you to continue the bipartisan tradition of support for the MSA and provide adequate resources for data collection and analysis for the benefit of our fishing industries and ocean fish populations.

The MSA—Ending Overfishing in the United States

Fish have been a staple in our diet and an important part of our nation's economic health since the time of the early settlers. George Washington himself managed a shad fishery at Mount Vernon, and Atlantic cod were critical to the survival and development of the early colonies. Unfortunately, overfishing (taking fish faster than they can reproduce) has diminished the economic potential of our nation's ocean fish populations, particularly in recent decades. Today, nearly a quarter of our commercially and recreationally important ocean fish populations—including some tuna, cod, flounder, snapper and grouper species—are severely depleted.²

Congress first attempted to address this problem in 1976 when it passed the Fishery Conservation and Management Act, the precursor to the MSA, to "Americanize" our fisheries by eliminating foreign fishing off the U.S. coast and promoting the domestic fishing industry. However, over the course of the next two decades, policies focusing on expanding fishing, as well as dramatic improvements in technologies to locate and catch fish, resulted in overfishing becoming a national problem. Historic overfishing led to the collapse of many important fish populations around the country, most notably in New England, where severe declines in catch of such staples as cod wrought tremendous damage to fishing communities.

¹National Marine Fisheries Service (NMFS), 2010, "Fisheries Economics of the United States, 2008," <<http://www.st.nmfs.noaa.gov/st5/publication/index.html>>.

²NMFS, "2010 Status of U.S. Fisheries: Fourth Quarter Update," December 30, 2010. <www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>.

A bipartisan group of lawmakers crafted the Sustainable Fisheries Act in 1996, which changed the focus of the MSA from promoting fishing to conserving fish, because they recognized the toll that overfishing was taking on fishermen and fishing communities across the country in the form of lost jobs, reduced catch and idle boats. Unfortunately, these changes did not put an end to overfishing, and in 2006 Congress overwhelmingly supported amendments to the MSA to end overfishing once and for all. Specifically, Congress required the establishment of science-based annual catch limits (ACLs) that do not allow overfishing and rebuild depleted fish populations and accountability measures to ensure success. President George W. Bush signed these amendments into law on January 12, 2007.

Thanks to these bipartisan reforms, today we are witnessing rebounding fish populations and increased fishing opportunities for commercial fishermen and recreational anglers across the country. For example, overfishing is no longer occurring in the Mid-Atlantic region; and summer flounder, which supports a valuable commercial and recreational fishery, is nearly fully rebuilt because managers finally reduced fishing pressure to sustainable levels. Just over twenty years ago, summer flounder had declined to less than 15 percent of healthy levels as a result of overfishing.³ Now, the population has rebounded to 89 percent of a healthy level, enabling managers to increase the 2011 quota by 7.35 million pounds to 29.48 million pounds, an 86.9 percent increase in just over three years from a low of 15.77 million pounds in 2008. In 2009, we commissioned an economic study that found rebuilding all Mid-Atlantic fish populations to healthy levels would generate \$570 million in annual economic benefits.⁴ Sound fisheries management is clearly a good economic investment.

In the Gulf of Mexico, conservation measures put in place by managers to finally end decades of overfishing on Gulf red snapper have allowed red snapper populations to increase, enabling managers to raise the allowable catch by 39 percent in 2010 to 6.945 million pounds.⁵ In 10 years, the red snapper catch is expected to increase from current levels to more than 10 million pounds annually, providing enduring economic benefits for fishermen and coastal communities hit hard by hurricanes and the recent Deepwater Horizon oil spill.⁶

In New England, the Fishery Management Council is reforming the important groundfish fishery by adopting for the first time science-based annual catch limits and creating the voluntary “sector” management system that enables fishermen to form cooperatives that allow them greater flexibility in when they fish and control over how they fish. Preliminary data from NMFS show that these reforms are working: in the first eight months of the fishing year, revenues were up 8 percent over the same time period in 2009, and the number of fish landed was down 12 percent.⁷ When the fishing year ends in April, we will join Congress in carefully evaluating the economic and environmental performance of this new management system. However, if early reports are any indication, we can expect an end to overfishing, which in time will lead to growing fish populations, healthier ocean ecosystems and greater profits in New England.

Return on Investment

As described above, America’s investment in the MSA is providing tangible returns to fishermen, coastal communities and the Nation. America’s fish are almost certain to become more valuable over time. While there are many factors that impact the market value of our ocean fish, the U.S. Department of Agriculture predicts that the price of fish and seafood in the U.S. is expected to increase significantly over time, faster than any other food through 2019.⁸ Protecting and expanding the U.S. wild fish supply is increasingly important because America has developed a seafood deficit, with over 80% of seafood consumed in the U.S. being imported in

³ *Supra* note i.

⁴ J. M. Gates, “Investing in Our Future: The Economic Case for Rebuilding Mid-Atlantic Fish Populations,” Pew Environment Group (2009), <www.endoverfishing.org/resources/PEG_rebuilding.pdf>.

⁵ National Oceanic and Atmospheric Administration (NOAA) Southeast Regional Office, 2010. “Southeast Fishery Bulletin FB10-027.” <<http://sero.nmfs.noaa.gov/bulletins/pdfs/2010/FB10-027%20Gulf%20Red%20Snapper%20FR%20Reg%20Amend.pdf>>

⁶ Gulf of Mexico Fishery Management Council, 2007. “Final Amendment 27 to the Reef Fish Fishery Management Plan and Amendment 14 to the Shrimp Fishery Management Plan.” <<http://sero.nmfs.noaa.gov/sf/RedSnapper/pdfs/FinalRFamend27-ShrimpAmend14.pdf>>.

⁷ NOAA Northeast Regional Office, 2011. “Sector Vessel Landings & Revenue, 2009 & 2010.” <http://www.nero.noaa.gov/ro/fso/reports/Sector_monitoring/Table_4.pdf> Accessed 3/2/2011.

⁸ United States Department of Agriculture (2010), “USDA Agricultural Projections to 2019,” See Table 39, page 99. <http://www.usda.gov/oce/commodity/archive_projections/USDA_AgriculturalProjections2019.pdf>.

recent years.⁹ The relatively modest Congressional investment of \$346.3 million for data collection and analysis programs that we recommend for FY 2012 is critical to begin reversing that trade deficit. NMFS estimates that rebuilding all of our depleted fish populations will deliver U.S. taxpayers an additional \$31 billion in annual sales every year and support for 500,000 new American jobs.¹⁰

Supporting the Transition to Long Term Sustainability

Though we are beginning to see early returns on our investments as the MSA is implemented around the country, we recognize that the transition to sustainability has resulted in challenges for some fishermen. Decades of overfishing have reduced many fish populations to very low levels, increasing the difficulty and cost of their recovery. Management measures such as significantly reducing catch in the near-term or closing areas to fishing for a limited period of time are sometimes necessary to end overfishing and restore these fish populations.

Unfortunately, some fishermen are calling on Congress to weaken the MSA's conservation requirements to address these short-term economic challenges. This would be a mistake, because it was the loopholes in the law prior to the 1996 and 2006 amendments that allowed fishery managers to put short-term economics ahead of long-term conservation, resulting in overfishing and depleted fish populations. Rather than repeating the failed policies of the past, Congress should look for ways to help fishermen transition to sustainability while allowing federal managers to fulfill the promise of the MSA's conservation provisions. For example, regional permit banks in New England are a possible solution for fishermen in the groundfish fishery who need a low cost way to obtain more quota. NMFS has already provided \$6 million to date to help New England states establish public permit banks to enhance fishing opportunities for small-scale groundfish fishermen.¹¹

Another challenge we face in the transition to sustainable fisheries management is setting science-based catch limits for fish populations that lack recent stock assessments, a situation that is most pressing in the South Atlantic, Gulf and Caribbean regions. Some assert that managers are making decisions based on inadequate science and advocate for weakening or eliminating the requirement to set ACLs for these so called "data poor" species. Decades of experience have proven that failing to establish ACLs creates demonstratively negative consequences for many important fisheries across the country. For example, managers did not set hard fishing quotas for South Atlantic black sea bass for over twenty years despite multiple assessments indicating the dire status of this fish. Now, twenty years later, managers must take difficult steps to restore South Atlantic black sea bass, including most recently closing the commercial and recreational season five months early. This example shows that eliminating the requirement to set ACLs for data poor species in the short-term can have severe long-term costs.

It is important to note that there are no fish species managed under the MSA for which there are no data. Information is available on basic biology, life history characteristics or commercial and recreational catch numbers that can be used to set catch limits even for fish without complete assessments. For these fish populations, there are tools available for managers to set annual catch limits, some as simple as locking in current catch levels until more complete scientific evidence indicates that the population can support more fishing. These short-term measures will avoid the long-term costs incurred from unwittingly allowing overfishing.

FY 2012 Appropriations—Investing in Data Collection, Analysis and Monitoring Programs

The end of overfishing in the storied New England groundfish fishery and the rebound of recreationally and commercially important fish populations like summer flounder in the Mid-Atlantic illustrate that the MSA is working. In order to build on this success, we must give managers the tools to fully implement the MSA. Data collection programs in particular are the lifeblood of good fisheries management, generating information that helps managers make informed decisions, and fishermen and other fishery-related businesses plan their investments and business ac-

⁹NMFS, 2011, "Fisheries Economics of the United States, 2009", <<http://www.st.nmfs.noaa.gov/st1/fus/fus09/index.html>>.

¹⁰Testimony of Eric Schwaab on Implementation of the Magnuson-Stevens Conservation and Management Act before the U.S. Senate Committee on Commerce, Science and Transportation Subcommittee on Oceans, Atmosphere, Fisheries and the Coast Guard, p. 3, March 8, 2011: <<http://www.legislative.noaa.gov/112testimony.html>>.

¹¹NOAA Northeast Regional Office. September 13, 2010. "NOAA and Rhode Island Department of Environmental Management Announce \$1 Million Initiative to Establish Rhode Island Groundfish Permit Bank." <http://www.nero.noaa.gov/nero/hotnews/RIGroundFishpermitbank/RIPB_PR9_13_10.htm>

tions. Congress should support these programs because they are critical for maintaining healthy fish populations that support stable and productive fisheries.

As such, PEG supports the President's FY 2012 request of \$346.3 million for the following core data collection, analysis and monitoring programs, an increase of \$1.4 million over FY 2010 enacted funding levels. We note that proposed reductions made by the Administration (described below) from FY 2010 levels will negatively impact programs that are important for monitoring, building bridges with fishermen and collecting important biological and socioeconomic data. PEG recognizes the difficult fiscal climate in the U.S., and we would like to follow-up with the Committee to discuss the long-term investment levels needed to support productive fish populations and fisheries. With regard to FY 2012, we support the following specific line-item requests:

- **Expand Annual Stock Assessments:** \$67.1 million as requested, an increase of \$16.2 million over the FY 2010 enacted level. Fish stock assessments are critical for setting science-based ACLs that prevent overfishing and maintain productive fisheries over time. This funding would provide NMFS greater capability to assess the 230 commercially and recreationally important fish stocks managed by the federal government. Timely, updated stock assessments reduce the scientific uncertainty associated with ACL-setting and can help fishery managers to increase commercial and recreational fishing opportunities while minimizing the risk of overfishing. We strongly support this critical increase in funding.
- **Fisheries Statistics:** \$24.4 million as requested, an increase of \$3.4 million over the FY 2010 enacted level. This budget line item supports programs that provide advice, coordination and guidance on matters related to the collection, analysis and dissemination of statistics in both commercial and recreational saltwater fisheries. The Marine Recreational Information Program, created to improve the quality and accuracy of recreational fishing data per the 2006 MSA amendments, is funded primarily through this budget line-item. Higher quality data on marine recreational fishing, which contributes \$59 billion in sales impacts to the U.S. economy and supports 384,000 jobs, will allow scientists to better estimate fishing mortality and set ACLs more accurately, thus reducing the risk of overfishing.¹² At a time when recreational fishermen and scientists agree that better data are critical for both restoring fish populations and increasing recreational fishing opportunities, we urge Congress to support this increase in funding.
- **Survey and Monitoring Projects:** \$24.2 million as requested, an increase of \$5 million over the FY 2010 enacted level. NOAA has stated that "many fisheries lack adequate and timely monitoring of catch and fishing effort."¹³ Survey and monitoring projects provide critical support for implementation of the new ACL requirement. Increased funding will improve the accuracy of ACLs and increase the percentage of stocks with assessments.¹⁴ Additional funding for fishery-independent surveys, monitoring and research will improve estimates of ecosystem change, fishing mortality and population size.
- **Observers/Training:** \$39.1 million as requested, a decrease of \$1.9 million from the FY 2010 enacted level. Trained fisheries observers provide essential data on the amount and type of fish caught by fishermen, which is used for compliance monitoring and scientific stock assessments.¹⁵ NOAA considers at-sea observers the most reliable source of information about fishing catch and bycatch (i.e., incidental catch of non-target ocean wildlife).¹⁶ We feel that this request does not reflect the annual investment needed for observer programs.
- **Cooperative Research:** \$7.2 million as requested by the President, a decrease of \$10.3 million from the FY 2010 enacted level. Cooperative research programs pay fishermen, working under the direction of federal scientists, to collect fisheries data and test new sustainable fishing gear and practices. These programs

¹² NMFS, 2010, "Fisheries Economics of the United States, 2008", <http://www.st.nmfs.noaa.gov/st5/publication/fisheries_economics_2008.html>.

¹³ NOAA, "Budget Estimates, Fiscal Year 2009, Congressional Submission," p. 166. Available at: http://www.corporateservices.noaa.gov/nbo/fy09_rollout_materials/NOAA_FY09_Final_CJ.pdf.

¹⁴ NOAA, "Technical Memorandum NMFS-F/SPO-56: Marine Fisheries Stock Assessment Improvement Plan: Report of the National Marine Fisheries Service National Task Force for Improving Fish Stock Assessments," October 2001. Available at: http://www.nmfs.noaa.gov/pr/sars/improvement/pdfs/marine_fisheries_saip.pdf.

¹⁵ NOAA, "NOAA FY 2012 President's Budget", Chapter 2: National Marine Fisheries Service, p. 315-19. Available at: http://www.corporateservices.noaa.gov/nbo/fy12_presidents_budget/National_Marine_Fisheries_Service_FY12.pdf.

¹⁶ NOAA/NMFS, Evaluating Bycatch: A National Approach to Standardized Bycatch Monitoring Programs, NOAA Technical Memorandum NMFS-F/SPO-66, October 2004. 108 p.

provide jobs for fishermen and also enable managers to tap into their on-the-water knowledge and expertise. In 2003, NMFS estimated that it would need \$25.5 million for cooperative research by FY 2009.¹⁷ We are concerned about the effect of the proposed reduction on fishermen and would suggest that cooperative research should be funded at this level.

In addition, the President's FY 2012 budget request transfers \$6 million out of the cooperative research line item and into the National Catch Share Program line item. We believe that any increases for catch share programs should be made with new money, not transferred from existing general research programs that should be available for all fisheries. Although NMFS asserts that the \$6 million will be used for cooperative research in catch share fisheries, there is no guarantee that it will continue to be used for cooperative research in the future. Taking funding from general cooperative research, where it would be available for all fisheries, and restricting it to only catch share fisheries, short changes the vast majority of fisheries, which are not catch share fisheries.

- **Fisheries Research and Management Programs:** total of \$184.3 million as requested, a \$6.5 million decrease from the FY 2010 enacted level. Fisheries research and management programs provide accurate and timely information and analysis of the biology and population status of managed fish, as well as the socioeconomic of the fisheries that depend on those populations. Such information is critical for the development of management measures to ensure that they end overfishing, and we have concerns regarding the reduction from FY 2010 levels. Because of their vital role, Fisheries Research and Management Programs should be funded at no less than the FY 2012 request of \$184.3 million. In NOAA's FY 2012 budget request, \$11.4 million is transferred from the Fisheries Research and Management Programs line item into the National Catch Share Program line item. As with Cooperative Research, no funds from this line item should be transferred to the National Catch Share Program because those funds would become permanently unavailable to support research and management of the vast majority of federally managed fisheries that are not currently in a catch share program, and may not be included in one in the future.

Conclusion

Good fisheries management leads to healthy fish populations, a stable and productive fishing industry and robust recreational fisheries—a win-win for conservation, anglers and marine-related businesses. Today, because of the MSA, fishery managers are using science-based catch limits that do not allow overfishing and rebuild depleted fish populations to healthy levels. These requirements are working, providing economic benefits to fishing communities and the nation as a whole, and promise to provide even greater returns in the future. We cannot afford to leave the job of bringing all fish populations to healthy levels unfinished—our nation's fishermen and our fish resources depend on it. The relatively modest investments that we are requesting today will lead to tremendous yield in the future. According to NMFS, rebuilding all U.S. fish populations will lead to a \$31 billion increase in annual sales and support for half a million new U.S. jobs.¹⁸

We ask the Subcommittee to continue its support of the MSA and invest at least \$346.3 million in FY 2012 in one of America's most valuable natural resources, our ocean fish populations, so that they can continue to provide significant and growing benefits for U.S. taxpayers through fishing jobs, healthy oceans, local seafood and vibrant coastal communities.



¹⁷NMFS' 2003 five year assessment estimated the need for cooperative research to be \$22.8 million above FY 2003 levels by FY 2009, for a total of \$25.5 million.

¹⁸Testimony of Eric Schwaab on Implementation of the Magnuson-Stevens Conservation and Management Act before the U.S. Senate Committee on Commerce, Science and Transportation Subcommittee on Oceans, Atmosphere, Fisheries and the Coast Guard, p. 3, March 8, 2011: <<http://www.legislative.noaa.gov/112testimony.html>>.