

**REVIEW OF MASSACHUSETTS FISHERY
MANAGEMENT PLANS**

FIELD HEARING

BEFORE THE

**COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE**

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

OCTOBER 3, 2011

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ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

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REVIEW OF MASSACHUSETTS FISHERY MANAGEMENT PLANS

MONDAY, OCTOBER 3, 2011

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Boston, MA.

The Committee met, pursuant to notice, at 9:02 a.m. in room A-1, Massachusetts State House, Hon. John F. Kerry presiding.

OPENING STATEMENT OF HON. JOHN F. KERRY, U.S. SENATOR FROM MASSACHUSETTS

Senator KERRY. This field hearing of the Commerce Committee will come to order. And it's my privilege to turn the floor over immediately to the President of the Senate, Therese Murray.

STATEMENT OF THERESE MURRAY, PRESIDENT OF THE MASSACHUSETTS SENATE

Ms. MURRAY. Thank you, Senator. And thank you for holding this very important field hearing today.

I want to thank Senator Brown, Congressman Frank, Congressman Tierney, and I don't see Congressman Keating yet. But thank you all for being here.

I'd also like to recognize the other Massachusetts elected officials who in this area of concern have joined us, and that's Minority Leader Bruce Tarr, Representative Ferrante, and I believe Senator McGee will be joining us also. And I want to welcome Senator Begich from Alaska and Under Secretary Lubchenco to the Massachusetts State House.

I hope that, if not today, that at some point you'll take a few minutes to walk around this historic building. And as you do, you will notice in almost every corner of this State House, there is a reminder of how important the fishing industry is for the Commonwealth—on the chandelier that hangs just under the golden dome in the Senate chamber, in the House gallery looking over the House floor, and the stained glass throughout the hallways.

Just as Massachusetts was the foundation for this nation, the fishing industry was the foundation of our economy. Sadly, each year, our fleet is vanishing. Each year, families who for generations have bravely and proudly fished our waters are forced out of their livelihoods. In my own district, which stretches along the coast from Kingston to Cape Cod, the few fishermen who are left are desperately trying to hold onto their boats, their houses, and to feed their families.

Our larger commercial fleets in Gloucester, New Bedford, and Provincetown have been decimated. And instead of trying to find solutions we have all been fighting for, we have consistently run into road block after road block. And in many cases, our fishermen have been seen as guilty until proven innocent.

Enforcement power by the Federal Government officials has been misguided, misused, and abused. And to make matters worse, the science used to determine the catch is antiquated and inaccurate, unfairly restricting the catch that the fishermen who have been able to hang on can rely upon.

So I say, and I believe I can speak for my colleagues in both the Massachusetts Senate and the House of Representatives who represent fishing communities, it is time for the road blocks to come down. It's time for NOAA to begin to work with our fishermen. And I hope today's hearing will shed some light on the continued questions about our fishing industry and that the thoughtful and meaningful dialog will produce positive and constructive steps which will help our fishermen maintain their livelihood and stop the erosion of a bedrock industry here in the Commonwealth of Massachusetts.

Thank you for taking me.

Senator KERRY. Thank you very much, Madam President. We really appreciate your helping us to use the facilities, and we are very appreciative for your leadership and friendship. Thank you. Appreciate you being here today.

Ms. MURRAY. Thank you, Senator.

Senator KERRY. Let me welcome everyone in this room for an opportunity to try to review where we are with respect to the Massachusetts fishing industry. And I am particularly happy today to welcome the Chair of the Oceans Subcommittee of the Commerce Committee, a good friend of mine, Senator Mark Begich from Alaska, who has taken the time to come up here as the Chair and share in this information gathering and exchange of views.

I'd just say to everybody here that over the now 26 years which I've been privileged to represent the state and, particularly, this industry in a lot of these struggles through the years, having rewritten the Magnuson bill at least two or three times, this has been a long fight. But throughout that fight, there has been a history of Alaska-Massachusetts cooperation.

Senator Ted Stevens and I became very good friends and worked diligently together. In fact, we were rewriting the 1994 Magnuson-Stevens Act when the Senate changed hands, and what was going to be the Kerry-Magnuson Act became the Stevens—or Magnuson-Stevens Act, as it happens in the Senate.

But we were partners. We were a team. And he was passionate about fishing, about the oceans. It is no small irony that he passed away going on a fishing expedition, which is what he loved to do every summer—took off in Alaska in a small plane, and we lost him a couple of years ago now. But it's really nice for me to have this partnership continue with Mark Begich, former Mayor of Anchorage, and who, believe me, is just as passionate and just as knowledgeable about the fishing interests and about this relationship that we need to work on.

So, I want this hearing today to consider the social and economic impacts of Federal regulation and discuss how we make improve-

ments, not only in the outcomes for fishermen but in the relationship with the Federal Government. I thank NOAA Administrator Jane Lubchenco for taking the time out of her schedule to be here, and I welcome all of the other witnesses who are here today.

I apologize for the elongated nature of this hearing room. But the Gardner Auditorium, where we would have perhaps met, was already booked, and we didn't want to delay the hearing yet again simply over location.

So nobody here needs any lessons about what a critical component of our historic, cultural, economic fabric the fishing industry is to us. Gloucester and New Bedford are two of the largest ports in the Nation for landing fish. And the commercial fishing industry of our state supports over 77,000 jobs in Massachusetts.

Unfortunately, for many of our fishermen and local businesses, they're all facing an increased difficulty of just staying in business. Jim Keding is like any other commercial fisherman in Massachusetts. He understands the rules and he's tried to live by them. And I think all of us can agree that the regulations shouldn't get in the way of common sense or simple efforts to try to provide adequately for family and to ply your trade.

But recent changes in Federal regulations have had an impact, a major impact, on the fishing allocation. It's made it much more difficult for Mr. Keding and for many others to make a living doing what they love to do and have done for years.

As a result, Jim has had to sell his boat and his home. Now he's forced to rent another boat just to make ends meet, and, obviously, I don't think anybody believes that's an acceptable situation. It highlights the challenge that we face, some of it just sheer disappointment, some of it economic reality, some of it a mistrust that has grown up, and we need to try to understand it better and eliminate that mistrust.

I intend to introduce legislation called the "Fishery Research and Conservation Investment Act," which will focus Federal funding under the Kennedy-Saltonstall Act on identifying the critical research, conservation, and management needs in each separate fishery region of the country. And I hope that this will once and for all allow the Federal funds to go where they were originally intended, to address the critical problems facing the science and the decisionmaking process, which has contributed to the mistrust.

Under this legislation, the fishery region would develop a 5-year fishery investment plan that would specifically address their needs, and money from the Kennedy-Saltonstall fund would be used to implement that. Our fishermen will be deeply involved in helping to develop these plans, something that I think many feel has not been sufficiently attended to.

I'd just say quickly that in 2009, Senator Kennedy and I, together with our House colleagues, worked to confront the Department of Commerce. And we requested an investigation into the potential abuses and intimidation of certain fishermen.

And, Dr. Lubchenco, even though you had only just taken office at that time, literally—it was 2009. The new administration had just come in and you'd just been appointed. The vast majority of those abuses took place during past administrations.

But, nevertheless, I want to thank you for taking our request seriously. You initiated a Department of Commerce Inspector General report. I know it's not an easy thing to do the moment you come into a new job. But I think it was important you did that. It helped to stop the abuse, and I think now more than \$600,000 has been returned in unnecessary fines. I think there's still more that we can do. You and I have talked about it. We can talk about some of that today.

In 2008, I was able to join with our colleagues in the House in successfully obtaining disaster funding for Massachusetts, and that has been helpful. But—and we've expanded the health insurance for fishermen. But every one of us knows we've got a long way to go to try to get this relationship on an even keel.

Most importantly, in 2010, approximately 80 percent of the gross revenues resulted from landings from only 20 percent of active vessels. That clearly threatens the future of small boat fishing in Massachusetts. And small boat fishing is what has been at the center of life in our state for generations. So that's the struggle. That's what we want to focus on. And Senator Brown will make a brief opening.

I need to apologize up front that because of the Super Committee requirements, I need to leave here around 11, 11:15. Hopefully, we will have been through both panels by then and the hearing will be wrapping up. But if not, I ask everybody's indulgence. If we're going to have any industries left of any kind, we need to be successful in that Super Committee work. So I know you understand that.

Senator Brown?

**STATEMENT OF HON. SCOTT BROWN,
U.S. SENATOR FROM MASSACHUSETTS**

Senator BROWN. Thank you, Senator, and thank you for holding this hearing.

As you know, in June, Senator Carper and I held a hearing on enforcement abuses and mismanagement of seized assets and lack of accountability that you just referenced. And this morning's hearing is a follow-up to that hearing to explore some of the larger issues.

And, as you noted, and rightly so—first of all, I want to thank you for your leadership on this issue, for holding this. We're obviously—I know we're working on the Oceans caucus. And I want to thank Senator Begich for coming out—he's working hard on these issues—and all the Congressmen and Mayors and elected officials who care very deeply about this real issue.

And you've noted the decline in vessels, the ever changing nature of fishing in Massachusetts. Gloucester, Fall River, New Bedford, and the surrounding New England areas are being—are dealing with some overzealous enforcement and a mismanaged transition to sector management. And this has combined to decimate the industry to historic lows, and, as you know, the fishermen are battling each and every day to try to just stay in business.

So we have a lot of real challenges. I'm excited to be here.

I'm glad, Dr. Lubchenko, you decided to come to this hearing, and I look forward to getting started.

Thank you.

Senator KERRY. Thank you very much.

With that, we are going to proceed. Senator Begich has decided—did you want to say one quick word?

Senator BEGICH. No. I want to get right to it at this time.

Senator KERRY. Dr. Lubchenco, thank you very much for taking time to be with us. We look forward to your testimony. If you could summarize, as is the norm, we'll put your full testimony in the record as if read in full. And we appreciate your being here.

**STATEMENT OF HON. JANE LUBCHENCO, Ph.D.,
UNDER SECRETARY OF COMMERCE FOR OCEANS
AND ATMOSPHERE, AND ADMINISTRATOR, NOAA,
U.S. DEPARTMENT OF COMMERCE**

Dr. LUBCHENCO. Thank you, Mr. Chairman, Senator Begich, Senator Brown, Representative Tierney, Representative Frank. It's my pleasure to be here with all of you today. Thank you very much for this opportunity to testify.

Senator Kerry, I want to thank you in particular for your leadership on fisheries, on oceans, and on climate issues.

And, Senator Begich, thank you for being here today. I really appreciate that, and I appreciate your leadership as well.

Let me start by saying that, as Senator Kerry has already noted, starting with my first day in office, I have taken fishing issues in this region very seriously. And I am firmly committed to many of the reforms that have been set in motion and others that are yet to come.

Fishing jobs have been at the heart of this region for decades if not centuries. I understand that fishermen here are suffering. Together, I believe we can and will do better.

The 2006 reauthorization of the Magnuson-Stevens Act put into motion new catch limits to end overfishing and to rebuild stock. Along with the new catch limits, the New England Fishery Management Council worked with NOAA to expand the sector program, to put new sector rules in place for New England groundfish which give fishermen increasing flexibility in operating their businesses.

Following decades of problems, there are now glimmers of hope. We are finally on track to end overfishing. Stocks are being rebuilt and catch limits are up. In addition, revenues are up for some but not all fishermen.

Fishermen are fishing more selectively, benefiting their bottom line and the vulnerable stocks. And new entrepreneurial activities leading to higher quality fish and higher profits are taking off under sector management. A community supported fishery in Maine provides weekly shares of local seafood through a cooperative, and a boat-to-table business in Rhode Island links fishermen directly to restaurants.

I believe that, in fact, we are making progress, but not enough, and very significant challenges remain. Not all fishermen are reaping these benefits. The costs are still high for implementing the sector program. Fishermen aren't catching the full allotment of fish.

So I pledge to continue working with industry, the Council, other stakeholders, and Congress to fix problems and make course correc-

tions to improve the system for all fishermen, including small boat fishermen. In the region, we are working aggressively, following up on the independent management review report and working with the council on a number of management adjustment reforms, including a number of excellent suggestions that you included in the July 26 letter from the New England delegation. We are acting on observer costs and monitoring approaches, access to unused quota in closed areas, excessive quota consolidation, innovative gear, and several other important improvements.

Sustainable fisheries, I believe, are about a better future for fishermen, for families, and for communities. Our goal is to enable fishermen to chart their course. We aim to accomplish this by giving fishermen more control over their operations, and to work with them continuously to adapt our management efforts.

Thank you for the opportunity to discuss NOAA's efforts on groundfish management in New England. Eric Schwaab, the Director of NOAA Fisheries, and I are here to answer questions.

Thank you.

[The prepared statement of Dr. Lubchenco follows:]

PREPARED STATEMENT OF HON. JANE LUBCHENCO, PH.D., UNDER SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE, AND ADMINISTRATOR, NOAA, U.S. DEPARTMENT OF COMMERCE

Senator Kerry and members of the Subcommittee, my name is Jane Lubchenco, and I am the Under Secretary of Commerce for Oceans and Atmosphere and the Administrator of the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA). Senator Kerry, I would like to thank you for your leadership over the many years on fisheries, oceans, and climate issues. In your tenure in the Senate you worked closely with Senator Stevens to rewrite the *Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act)* and you continually show commitment to building sustainable coastal economies. I appreciate your support of NOAA and our efforts to improve the products and services that are vital to supporting America's businesses, communities, and people.

Fishing jobs have been at the heart of this region for centuries. I take the challenges in the Northeast region very seriously, as I know you do. Following decades of overfishing and decline, including the collapse and closure of this fabled fishery, and years of legal battles, the past 10 years have been particularly challenging for those who catch cod, haddock, and other groundfish. Court rulings calling for science-based catch levels drove the government to implement well intentioned but ever tightening regulations under the "days at sea" management system. Under this system, individual fishermen were told how many days and when they could fish, which often forced them to sea in bad weather. And they were told how much fish they could bring back to port on each trip, forcing them to pitch their extra catch overboard as wasted by-catch. From 2001–2009, landings dropped by nearly 40 percent, revenues fell by more than one half, and the number of vessels in the fishery dwindled to less than half their previous levels. And because these regulations often did not succeed in halting overfishing, the rules were always changing. The last decade saw 11 major regulatory overhauls and changes in the rules every 4 months on average, including ratcheting down on the number of "days at sea" available. Decades of overfishing, failing fish stocks and punishing regulations interacted to threaten the region's most iconic industry.

That system was not working for fishermen. It was driving them out of business and the stocks were not rebuilding to a point where they could sustain a profitable industry. In response, the New England Fishery Management Council—with representatives from Massachusetts and other New England state governments, commercial and recreational fishermen, and a representative from NOAA—held more than 60 public meetings over 3 years to develop a new approach called "sector management." This approach revolves around a system of voluntary cooperative fishing groups (called "sectors"). Most importantly, this approach gives fishermen greater flexibility and ownership over the day-to-day management of their businesses. In June 2009, the Council voted 14–1 to approve the new program. This new sector

management program was expanded at the same time that the much lower catch limits required by the *Magnuson-Stevens Act* were implemented.

The adoption of this new management system and the lower catch limits happened early in my tenure as Administrator. Indeed, sustaining the groundfish fishery and the economic health of the industry has been of paramount importance to me since my first day in office. I understand how important it is to the region's economy and culture. I also know that implementing tough measures to end overfishing and to rebuild stocks is not easy for fishermen and fishing communities.

For those reasons, I have devoted significant energy to take action in three key areas that I will talk about today: (1) our work with fishermen and the New England Fishery Management Council to help get this fishery on a pathway to sustainability and long-term profitability; (2) our top-to-bottom overhaul of NOAA operations in the region, including an independent management review and follow-up actions we have already taken; and (3) advancing concrete proposals that build on your ideas—and those of other partners in New England—to address residual problems faced by fishermen in the region and to build on the progress made.

Our goals are clear: to be a partner in the success of fishermen, to sustain fishing jobs, to create a profitable and healthy future for fishing communities, and to maintain marine fisheries. We appreciate your support in getting there.

We are working with fishermen and the Council to put the fishery on a path to profitability.

As described in detail later in my testimony (Attachment A), fishing in all its forms is a \$71 billion per year industry in the United States, generating economic activity that creates 1.4 million full and part-time jobs, from the boat captains and crews, to people in processing plants, trucks, seafood markets, and restaurants. Rebuilding *all* U.S. fish stocks would generate an additional \$31 billion in sales impacts, support an additional 500,000 jobs and increase dockside revenues to fishermen by \$2.2 billion, which is *more than a 50 percent increase from the current annual dockside revenues*. New England, the region with the most number of overfished species as of this summer, stands to gain significantly as overfishing ends and fisheries are rebuilt. A prime example of the benefits of rebuilding is seen in the New England sea scallop fishery, where revenues increased five-fold as the fishery rebuilt, from \$44 million in 1998 to \$265 million in 2010, making New Bedford the largest port by value every year since 2000.

To get the New England groundfish fishery back on track, I embraced new management decisions made by the Council, and I provided resources to speed up the transition to a fishery with a more sustainable future. I did this because I realized the seriousness of the dire economic situation in New England and because the days-at-sea system was not helping the fish or the fishermen. While there are improvements to be made in the sector system and fishermen are still struggling, glimmers of hope are now finally emerging in the fishery after decades of problems. We don't want to return to the past, so we must work together to continue the recent progress we've seen, address the imperfections of the new system and get this fishery back in the black. The progress we've made is due directly to the active engagement of fishermen from throughout the region and our intense efforts to reverse our trajectory. Although we still have much more work to do, I believe we are turning the corner.

I want to empower fishermen to chart their course. We will do that by simplifying regulations, giving fishermen more control over their operations, and working with them on management. For decades, the New England groundfish fishery underperformed both ecologically and economically with not enough fish to support good fishing jobs. The 2006 Magnuson-Stevens Act reauthorization put into motion two important changes. First, it set annual catch limits to end overfishing and to rebuild stocks. Second, the Council worked with NOAA to put new rules in place to give fishermen increased flexibility in how they operate their businesses.

How are we doing after 1 year with new catch limits and with the expanded sector management program? We see both signs of progress and continued room for improvement.

Signs of progress:

1. *We are finally on track to end overfishing.* For the first time ever, we have catch limits and accountability measures in place and clear ability to track progress. In 2010, fishermen fished within the limits for 18 of the 20 stocks. This is excellent news.
2. *Stocks are being rebuilt and therefore catch limits are up.* Due to the rebuilding progress already underway, in the 2011 fishing year, catch levels have gone up for 12 of the 20 groundfish stocks, which is another indication the Magnu-

son-Stevens Act and associated management measures are working to improve the status of the stocks and the economics of the fishery.

3. *Fishermen are fishing more selectively which benefits their bottom line and avoids depleting already low stocks.* Despite lower catch limits for many stocks, under sector management fishermen were able to fish smarter by more effectively avoiding weaker stocks and by capturing a higher percentage of the allowable catch. Fishermen and sector managers have reported to us how incentives have changed under this cooperative management approach. They have noted they have the ability to spend more time offshore, seeking high abundance stocks and avoiding bycatch of weaker stocks. Sectors free fishermen from limitations of days at sea management conditions.

4. *We have a better accounting for and less waste of bycatch.* Fishermen captured more high-valued species and kept more of the fish that had historically been thrown overboard. For example, only 9 percent of Georges Bank yellowtail flounder total catch was discarded in 2010 compared to 31 percent in 2009. Adhering to catch limits and reducing discards will hasten rebuilding, yielding increased quotas more quickly.

5. *New England fishermen are beginning to realize new entrepreneurial opportunities under sector management.* Here are three examples: (A) A group of small-boat fishermen in Rhode Island has started a new business to market their fish directly to local restaurants as “boat to table.” (B) Another new company helps fishermen match their supply to consumers’ demands across New England. (C) Fishermen in Port Clyde are making the most out of their catch through a Community Supported Fishery program. This program is similar to the Cape Ann Fresh Catch program started by the Gloucester Fishermen’s Wives Association and supported by NOAA Sea Grant. Customers give the fishing community financial support in advance of the season, and in turn the fishermen provide a weekly share of seafood during the harvesting season. This innovative marketing program is leading to higher quality fish and higher profits. In each case, the sector program provided fishermen with the flexibility to be entrepreneurial and innovative, and to control the destiny of their small businesses. In each case, fishermen have been freed from overly burdensome regulations, and they can fish more safely.

6. *Revenues are up for some but not all fishermen.* For example, the average New England groundfish fisherman earned 16 percent more per pound this year than last. Revenues for groundfishermen from Portland, Maine, were up by 25 percent. For those with a homeport in New Bedford, the increase was over 20 percent. These initial numbers are encouraging, but we need the full balance sheet reflecting revenues and costs and particularly changes in number of boats to know the full story, and we’ll have that information in the near future.

Challenges Remaining:

1. Not all fishermen are reaping these benefits. While we have some promising preliminary economic information about the first year of the program in New England (above and Attachment B), overall statistics can mask the trouble that some fishermen are facing. Some fishermen appear to be having a tough time making the transition to sectors. I want to understand why some sectors seem to be working well while others do not and identify corrective actions. And I want to work with those in Congress and in coastal communities who want to help improve the system for all fishermen, including small boat fishermen.

2. Some fishermen continue to distrust the scientific information used to set limits. Moreover, more frequent assessments for some stocks would be desirable. And, we are requesting additional resources for stock assessments in our FY 2012 budget.

3. Costs of implementing the sector program remain a challenge.

4. Faster adjustments in response to changing status of stocks and more nimble ability to implement innovations are needed.

5. Better communication among NOAA, fishermen and the Council is desirable.

6. Improved understanding of and responsiveness to economic challenges faced by fishermen is needed.

In the next section, I lay out a number of specific actions NOAA is advancing to help with these and other implementation problems.

Responsive actions underway. After learning about problems in NOAA’s operations in the region, I have overseen a top-to-bottom overhaul of our work in the region, including in the areas of enforcement, science, management and engagement.

In one of our first steps, Eric Schwaab, our Assistant Administrator for fisheries, took the initiative to set up a comprehensive, independent review of management in the region; that review provides some excellent suggestions that we are now pursuing. Our overhaul is still underway and is bringing long-overdue change. We have also committed to seeking industry and regional input as we work to fill the Northeast Regional Administrator and Northeast Science Center Director positions.

The Management Review, conducted by an independent firm, provided a regional analysis and management review of the fishery management process in New England, focusing on the relationships among the New England Fishery Management Council, the Northeast Regional Office, and the Northeast Fisheries Science Center. The review examined how effective those three entities are at carrying out their responsibilities under the *Magnuson-Stevens Act*. This review included nearly 200 independent interviews with stakeholders across the region. In April, NOAA released the results and at my direction, immediately began taking actions to address management, science, and communications issues identified in the review.

In tackling the multiple issues identified in the report, NOAA Fisheries began with those changes that would bring the greatest benefit: (1) simplify governance; (2) simplify communications; (3) improve science collaboration; and (4) maximize overall collaboration. Because many of these changes require Council action, NOAA Fisheries is working closely with the New England Fishery Management Council on many of these efforts. At its meeting on September 26, 2011, the Council and the agency reported on progress to date, including:

1. *Fast tracking a mid-term review of the current five-year research strategic plan for cooperative research to ensure it is responsive to industry, management, and scientific priorities.* Our Cooperative Research Program is wrapping up a series of outreach meetings with fishermen and scientists to gather input to refine its research strategic plan through 2014.
2. *Overhauling our data collection and management system.* We have initiated a review and analysis of the regional data systems to better integrate them and improve efficiencies. NOAA's Satellite and Information Services staff, which has conducted similar work in the past, has begun this review.
3. *Developing new operating agreements.* We are working on new agreements with the New England and Mid-Atlantic Councils to clarify roles and responsibilities, strengthen collaboration, simplify the governance structure and process, and highlight opportunities for public input.
4. *Launching a "plain language" campaign;* we are striving to make all of our written documents more clear and concise.
5. *Establishing a single Communications Team in our regional office—representing the region, the center and the Office of Law Enforcement—to simplify and strengthen our outreach and collaboration efforts and streamline and improve our external communications.* We host regular meetings with sector managers to identify and resolve issues related to sector management, provide information, and get feedback from the fishing industry.
6. *Hiring a former commercial fisherman in New England to serve as our first formal compliance liaison in the country.* He is working directly with the fishing industry in a non-enforcement capacity to improve communications and ensure all can comply with needed conservation measures.
7. *Developing a revised approach for producing stock assessments that we will begin transitioning to in 2013.* The intent of this new approach is to provide managers the information to adjust annual or biennial catch limits in response to changing stock conditions, so industry can take quicker advantage of healthy stocks and not overfish newly depleted stocks.

Future actions. Even with the significant progress made, we have much work ahead and are open to any good ideas about how to make progress with the fishery and our effectiveness. I appreciate the suggestions offered by the July 26 letter from the New England Delegation, and intend to pursue aggressively the following actions:

1. *Develop more cost-effective observer and monitoring approaches, and a cost-transition plan that recognizes chronic economic challenges facing many segments of the industry.* We understand that adaptation to any new management system is challenging, and the timing of sector implementation in conjunction with the requirement to set annual catch limits to end overfishing created an even more difficult transition. In recognition of the hurdles faced by the fishery associated with that transition, in Fiscal Years 2009 and 2010, NOAA invested over \$47 million to assist in many ways, including to offset start-up costs of

groundfish sectors, conduct at-sea research with industry, and develop permit banks.

In addition, recently, NOAA's National Marine Fisheries Service (NMFS) re-evaluated the effectiveness of the dockside monitoring program, made a timely adjustment to the requirements, and redirected funding for that program to make approximately \$1 million in additional funds available directly to sectors to support their operations.

While monitoring is critical to the sector management program's success, I recognize that at-sea monitoring costs are difficult for the fishing industry to assume and I share your desire to reduce these costs; NOAA is working to do so. NOAA is also working with the fishing industry to improve the utility of new monitoring tools beyond at-sea monitoring, such as electronic catch monitoring, which could reduce overall monitoring costs to the industry. Pilot programs are currently underway to test the effectiveness of these techniques. Following these pilots, we will work with the Council, sector managers, and stakeholders to more broadly implement electronic catch monitoring technology, and I am committed to nationwide efforts that will reduce the economic burdens associated with monitoring costs.

2. *Evaluate input controls and provide access to unused quota.* Following the 2010 fishing year, two particular issues arose that require agency and Council attention. Earlier this summer, we asked the Council to consider action to raise the 10 percent unused quota carryover provision. Additionally, the Council is considering the continued merits of groundfish closed areas through an Essential Fish Habitat amendment process. We have and will continue to advocate that the Council give priority to both issues.

Underutilization of available catch is an on-going challenge in the groundfish fishery. The fishery has under-harvested available quotas for a number of species over the last several years. I embrace the goal of fully exploiting available quotas and will continue to support Council and NOAA efforts to help the industry catch the maximum amount of fish allowed across the full range of managed stocks. Continuing evolution of the management program to sectors, as well as conservation engineering solutions, such as net design, will result in improvements in the fishery's ability to catch more of the available fish. Moreover, I firmly believe that under the sector program we can and should look for opportunities to expeditiously open closed areas, which will directly benefit fishermen.

3. *Improve understanding, delivery and use of socio-economic data.* We have worked aggressively to understand the complex economic conditions impacting fishermen, and a detailed description of this work is contained in Attachment B.

- We are now completing a more comprehensive annual report on groundfishing for year 2010 that will help us to better understand performance at the vessel ownership level. The report will analyze vessel operating and sector membership cost and information about quota trading to better evaluate changes in fishery and financial performance.
- We are also in support of the Massachusetts Division of Marine Fisheries (DMF) in a study with the University of Massachusetts' School for Marine Science and Technology (SMAST) to better understand the challenges faced by the South Shore fishermen of Sector X. This is the work initiated in response to Governor Patrick's earlier request for a fishery disaster declaration. We anxiously await the results.
- A team of NMFS, DMF, and SMAST is conducting an analysis of how the financial position of vessels was affected by the 2010 transition to catch-share and quotas-based management through a "break-even analysis" of the groundfish fishery. The team has compiled vessel profiles using statistical averages for seven gear and vessel size categories. The analysis was completed in mid-September and is currently undergoing peer review. We understand how important this analysis is and have had our economists working closely on this project, have met with this team bi-weekly, and given financial support to ensure its completion. Preliminary analysis shows that while a number of fleet segments performed better in 2010 relative to 2009, some segments did perform worse, including some of the smaller boat segments.

4. *Address the concerns about excessive accumulation of fishing privileges.* Soon after the sector program was approved by the Council, NOAA identified consolidation as a potentially serious problem and requested the Council ensure the

continuation of a diverse fleet. NOAA is working with the New England Council to develop an amendment to the Northeast Multispecies Fishery Management Plan. This amendment would set limits on the amount of fishing privileges that can be accumulated by a particular individual, business or other entity such as a sector. At the Council's request, we published a "control date" of April 7, 2011, to notify the industry that accumulation of fishing privileges after that date may be treated differently than those accumulated before the date. Establishing a control date also gives the public notice that interested participants should locate and preserve records that substantiate and verify their ownership or control of groundfish permits and other fishing privileges in the fishery.

5. Encourage development of innovative gear. NOAA has provided funding for other innovations to improve overall groundfish fishery performance, particularly cooperative research to help the fishing industry develop more selective gear and fishing methods to enable fishermen to reduce the bycatch of the more vulnerable stocks, allowing the industry to fully utilize quotas for healthy groundfish stocks. A few examples of the types of research underway include modifying a net to a topless trawl to better target flounder while avoiding cod and haddock and creating several additional escape panel designs to promote escape of certain species or size classes of fish; increasing the size of codend meshes to reduce bycatch of non-cod species while increasing the value of cod captured by targeting larger fish; testing tension sensors deployed within the meshes at the rear of the net to reduce discarding and allowing operators to be more strategic in the capture and marketing of their catch; ongoing testing of fuel consumption to determine the overall profitability of using the modified gear in comparison to unmodified gear; and developing an inexpensive, under-water-detaching codend to address the problem of catching large amounts of unwanted fish species. I am committed to supporting such innovative approaches to fishing and to have NOAA assist in the expeditious deployment of these innovations.

It is worth noting that in addition to managing fisheries, NOAA provides a wealth of services to fishermen in New England. NOAA marine weather reports and navigation charts provide critical information for fishing vessels; NOAA satellites provide data for weather reports and receive search and rescue signals; and NOAA scientific research informs future management. In summary, implementing a completely new fishery management system in New England is challenging and requires close attention to design during this early phase, but the system also holds promise for increasing flexibility and economic returns for fishermen. As I have highlighted in my testimony, the agency is working diligently to address issues together with the Council and the industry as they arise. While we are making good progress, we acknowledge the system is not perfect and we are committed to continually making improvements.

We are seeing benefits from the transition to sector management as catches do not exceed the annual catch limits, and fishing becomes more efficient and flexible, all of which contribute to the common goal of ecological and economic sustainability of groundfish stocks. NOAA will continue to work with the fishing industry and the New England Council to adapt these programs as needed, and to ensure open and productive communication with the New England fishing community.

These are extremely challenging economic times for the Nation, and that is certainly true for fishermen. There are no easy answers, no silver bullets, and I do not come here claiming to have all the answers. But one thing I am sure of is the need for all of us to continue to work together toward the shared goal of sustainable fisheries and good fishing jobs. Sustainable fisheries are about a better future—a time when fishermen can rely on fishing as a stable income for their families, a time when grandparents and grandkids spend a day out on the water fishing, and a time when fishing communities can count on fishing to help their local economies recover and thrive. I believe fishermen, scientists, environmentalists, processors, chefs, government managers, and others can work together toward these shared goals.

Thank you again for the opportunity to discuss NOAA's efforts on groundfish management in New England. We are available to answer any questions you may have.

ATTACHMENT A

The Value of Rebuilding Fisheries Across our Country

Fishing in all its forms is a \$71 billion per year business in the United States, and that business is vital to the economies and identities of our coastal commu-

nities. The economic activity generated by fisheries creates 1.4 million full- and part-time jobs, from the boat captains and crews, from the oyster farmers to the people in processing plants, trucks, seafood markets, and restaurants.¹

NOAA economists estimate that rebuilding all U.S. fish stocks would generate an additional \$31 billion in sales impacts, support an additional 500,000 jobs and increase the revenue fishermen receive at the dock by \$2.2 billion.² This is more than a 50 percent increase from the current annual dockside revenues.

We are making gains across the country as individual fisheries have recovered, which will increase as we finally bring an end to overfishing. One place the benefits of rebuilding are most apparent in the New England sea scallop fishery. Since beginning to rebuild in 1999, the scallop fishery has experienced an average annual growth in landings revenue of 19 percent (16 percent after adjusting for inflation, *i.e.*, real terms), increasing from \$44 million in 1998 to \$265 million in 2010, a five-fold increase. While there have not been ups and downs, overall the fishery has demonstrated sustained growth, with landings revenue increasing relative to the previous year in ten of the past 12 years. In Massachusetts alone, the commercial harvest of sea scallops generated an increase in jobs in the fishing industry as well as across the broader state economy, rising from 4,700 jobs in 1998 to 30,000 in 2010. The rebuilt sea scallop fishery also contributes to the economic sustainability of fishing communities. The port of New Bedford is the largest port in the country by value than any other every year since 2000, in large part due to its sea scallop landings. Landings revenue in New Bedford has experienced sustained growth since rebuilding of scallops, increasing in nine of the last twelve years and 23 percent higher in 2010 relative to 2009.³

More generally, in these challenging economic times, during 2010 the commercial fishing industry was a strong performer. While unemployment rates more than doubled from 4.6 percent in 2007 to 9.6 percent in 2010, employment and employment impacts generated from commercial fishing increased.⁴ In particular, both jobs and job impacts generated by the commercial fishing industry increased 16 percent in 2010 over the previous year and, indeed, were at their highest levels since 2006. In addition, commercial fishermen received \$ 4.5 billion for their catch in 2010, a 10 percent increase over 2009 levels. Overall, the commercial fishing industry—from harvest, through the dealer and processing sectors, whole sale sectors, to retail outlets (including seafood markets, grocery stores, and restaurants)—generated \$116 billion in sales impacts, contributed \$48 billion to GNP, and supported 1 million jobs in the fishing industry and across the broader economy.⁵

Catch share programs, and, in particular, established catch share programs (those implemented prior to 2007), have been a bright spot for U.S. commercial fisheries in recent years. Among the established programs that NMFS is able to report on, the majority experienced revenue growth from 2007 to 2009, with increases ranging from 8 percent to 128 percent, despite the fact that overall landings revenue declined nationally during this timeframe. Although we do not have landings revenues for most of the catch share programs for 2010 yet, nationally commercial fishing landings revenues increased more than 10 percent from 2009 to 2010. Revenue is up even as we are rebuilding stocks and implementing annual catch limits in all federally-managed fisheries. These programs give fishermen the ability to work around weaker stocks and then focus on the healthier stocks.

Marine recreational fishing is also widely recognized as a critical economic driver of, and contributor to, local and regional economies, as well as the national economy. Take for example, the Gulf of Mexico and the Southeast Atlantic regions, where our most recent statistics (2009) show combined expenditures on saltwater fishing trips and durable fishing equipment of \$10.1 billion annually; or the Mid-Atlantic and Pacific regions where expenditures for these items reach \$3.5 billion and \$2.2 billion

¹National Marine Fisheries Service. 2011. Fisheries Economics of the United States, 2009. U.S. Dept. Commerce, available at <http://www.st.nmfs.noaa.gov/st5/publication/econ/2009/FEUS%202009%20ALL.pdf>.

²Internal analysis using the National Marine Fisheries Service Commercial Fishing & Seafood Industry Input/Output Model. For additional information on this model, see “The NMFS Commercial Fishing & Seafood Industry Input/Output Model.” available at <https://www.st.nmfs.noaa.gov/documents/Commercial%20Fishing%20IO%20Model.pdf>.

³National Marine Fisheries Service. 2011. Fisheries of the United States, 2010. U.S. Dept. Commerce, available at <http://www.st.nmfs.noaa.gov/st1/fus/fus10/index.html>.

⁴National unemployment rate data obtained from http://data.bls.gov/timeseries/LNU04000000?years_option=all_years&periods_option=specific_periods&periods=Annual+Data. Commercial fishing industry job and job impact numbers obtained from the NMFS Commercial Fishing Economic Impact Model.

⁵National Marine Fisheries Service. 2011. Fisheries Economics of the United States 2010 (forthcoming).

respectively, on an annual basis. This significant economic activity generates local jobs that cannot be outsourced, which support communities large and small in our Nation's coastal states, territories, and commonwealths. Businesses directly impacted by recreational fishing range from marinas, boat dealers, and bait shops to hotels, restaurants and other service-oriented businesses in coastal communities. In those communities where it is common for recreational fishermen to maintain a second home, saltwater anglers can be a factor in the local housing market. Overall, saltwater anglers took 74 million fishing trips in 2009, with angler expenditures generating \$50 billion in sales impacts, contributed \$23 billion to GNP, and supported over 327,000 jobs across the broader economy.⁶

ATTACHMENT B

Socioeconomic Performance of the Northeast Groundfish Fleet in 2010

Economists and social scientists at the Northeast Fisheries Science Center recently reported on fishing year 2010 performance of groundfish vessels holding limited access permits—the vessels that rely most on groundfish landings and revenues, and that have been the most affected by the management measures newly in effect in 2010.

Some of the news is positive. Both prices and total gross revenues from all species landed by groundfish vessels were up for 2010 in comparison to 2009. This is despite the fact that annual catch limits, required for rebuilding, resulted in a decline in total landings of groundfish species for the third year. Average revenues per vessel were also up for 2010 in comparison to 2009.

Massachusetts ports have received about \$12 million, approximately half of the increased revenues during 2010, of which \$6.8 million was generated by vessels home ported in Massachusetts, with the remaining revenue produced by vessels home ported elsewhere but landing their catch in Massachusetts ports. Massachusetts was the only state where revenues from groundfish landed there were higher than in 2009.

Fishermen also captured more higher-valued species and kept more of the fish that had historically been thrown overboard. Reducing discards and increasing capture of available quota is an important shared goal of fishermen, the Council and NOAA. The sector program led to substantial reduction in the amount of groundfish discarded because, unlike the effort control system under “Days-at-Sea,” sectors do not limit the amount of fish they may land in a day or on a particular trip, and are not permitted to discard legal-sized fish. For example, 31 percent of Georges Bank yellowtail flounder total catch was discarded in 2009 compared to only 9 percent in 2010.

In addition to the 2010 groundfish vessel performance report described above, the agency is working on a number of fronts to improve our socioeconomic reporting and analyses of fisheries. We are now completing a more comprehensive annual report on Groundfishing Year 2010 that will help us to better understand performance at the vessel ownership level. The report will analyze vessel operating and sector membership cost and information about quota trading to better evaluate changes in fishery and financial performance. We are also working to support the Massachusetts Division of Marine Fisheries (DMF) in a study with the University of Massachusetts' School for Marine Science and Technology (SMAST) to better understand the challenges faced by the South Shore fishermen of Sector X. This is the work initiated in response to Governor Patrick's earlier request for a fishery disaster declaration.

A separate “break-even” analysis of how the financial position of groundfish vessels was affected by the 2010 transition to catch-share and quotas-based management is also being conducted in a collaborative effort between NMFS, DMF, and SMAST. Vessel profiles using statistical averages for seven gear and vessel size categories have been compiled and the analysis was completed in mid-September and is currently undergoing peer review. We understand how important this analysis is and have had our economists working closely on this project, have met with this team bi-weekly, and given financial support to ensure its completion. Preliminary analysis shows that while a number of fleet segments performed better in 2010 relative to 2009, some segments did perform worse, including some of the smaller boat segments. NMFS is concerned about the impacts on these small boats and will continue to work with the Council to understand the root causes of the negative outcomes and identify corrective actions.

⁶Fisheries Economics of the United States, 2009.

Senator KERRY. Thanks very, very much, Dr. Lubchenco. I appreciate the directness and brevity of that and it's helpful to us.

And we'll just begin with the question period. I think we'll do what, about a six-minute round?

Let me begin by asking you this. For years, we have been in the Congress ready to respond to agricultural challenges around the country. And whether there's a drought or a flood or, you know, some kind of crop problem of one kind or another, billions of dollars have been allocated in emergency assistance to various parts of the country.

I often link our fishing folks to the same industry, to farming. They live off the sea, live off the land, but they're really farming from the ocean. And when the government steps in and creates a dislocation rather than Mother Nature, and people are selling their boats or their homes, we have a disaster, an economic disaster.

I know the Governor has submitted data. We've had a number of conversations about this. All of us have joined together in trying to urge the issuance of a disaster declaration to provide holdover assistance to fishing folks so that they can look to the day when the stocks are replenished but know that they're still going to have a part of that. And we're still, you know, locked in on sort of an effort to try to get that.

We talked the other day about it, and you indicated, I think, at that time that the key here is, obviously, we have to meet the statutory requirements, we have to meet the standards. It's our feeling that we have, and we'd like to get a sense from you where we stand with respect to that. And will the department support our efforts to secure that disaster declaration?

Dr. LUBCHENCO. Mr. Chairman, I've long supported providing assistance to fishermen when the circumstances warrant doing so. After the Governor's request to the secretary to declare a disaster for fisheries in the Commonwealth was denied because revenues were up, NOAA suggested that the Commonwealth focus on those regions that were suffering the most. And we have worked hard to assist the Commonwealth in multiple ways to pull together the requisite information to support such a request. We have not yet received that request at a smaller scale, more fine-grained level of analysis, which I believe—

Senator KERRY. Who do you have to receive that from?

Dr. LUBCHENCO. We are expecting to receive that from the Governor, which is why we have been working with him and with his staff to pull together information about changes in the economic status focused on those regions that are the most challenged. And once that request is in hand, the secretary makes a determination, and it needs to be approved by OMB.

Senator KERRY. Are they aware of specifically what information is needed to sort of complete this, to round the circle?

Dr. LUBCHENCO. We have made it abundantly clear multiple times. The Governor's staff, I think, is well aware of what is needed.

Senator KERRY. So in what—give us a sense of a time frame here. What could we anticipate, in your judgment?

Dr. LUBCHENCO. The time frame is up to the Governor.

Senator KERRY. So if they got that to you—

Dr. LUBCHENCO. We are waiting on the Governor.

Senator KERRY. If you get that within a short period of time, how quick is your turnaround?

Dr. LUBCHENCO. I can assure you that we will do everything we can to expedite a secretarial decision, which, as I mentioned, needs to be approved by OMB.

Senator KERRY. Can you give me a ball park on that time line?

Dr. LUBCHENCO. We could—as far as I'm concerned, we can turn it around quickly. I can't speak for the secretary, and I can't speak for OMB. But I can assure you we would do everything we can to move it as expeditiously as possible. As you are well aware, a disaster declaration does not automatically come with any funds. Then it would be up to Congress.

Senator KERRY. We have to get the money. Look, we understand.

Dr. LUBCHENCO. Absolutely.

Senator KERRY. We know the battle we're in. But we want the ability to go get that, and we need the help in order to do it. But you underscore—I mean, what you've just said underscores part of the problem which I raised in my opening, which is—you said the technicality was that revenues were up.

Dr. LUBCHENCO. Across the board for the region.

Senator KERRY. Right. And I accept that. But that represents 80 percent of landings to—you know, to the 20 percent of vessels. So 80 percent of the industry, of the vessels, are not seeing revenue up. Eighty percent is a pretty high figure to be hurting. And if the measurement—if we're stuck in those kinds of technicalities, I think that's the kind of thing that just drives everybody crazy.

Dr. LUBCHENCO. Senator, I agree with you completely, which is why we have gone back to the state, to the Commonwealth, and said, "This is what we need. Give us this so that we can move forward."

Senator KERRY. But what about the actual allocation? I mean, do you have an allocation—this is the catch share, so a downstream impact. If catch shares result in so much of the landings going to so few of the fleet, something is wrong, is it not?

Dr. LUBCHENCO. Senator, the data that we have from the last year, of the first full year of implementation of the expansion of the sector program, shows that the changes that happened in that year are a continuation of changes that have been going on for a long time. If you look at changes from the year 2001 to 2009, landings dropped by 40 percent, revenues fell by over one-half, and the number of vessels dwindled—

Senator KERRY. In what—in the whole period?

Dr. LUBCHENCO. From 2001 to 2009, landings dropped by nearly 40 percent, revenues fell by over one-half, and number of vessels dwindled to half their previous levels. So these changes have been ongoing for some time.

Senator KERRY. Is that broken down? Could you get that to us on a year-by-year—

Dr. LUBCHENCO. I would be happy to give you those data.

Senator KERRY. On a year-by-year?

Dr. LUBCHENCO. We have those by year.

[The information referred to follows:]

Provide year-by-year breakdown of the downward trends mentioned in Dr. Lubchenco’s testimony in regard to landings, revenue, and number of vessels from 2001–2009.

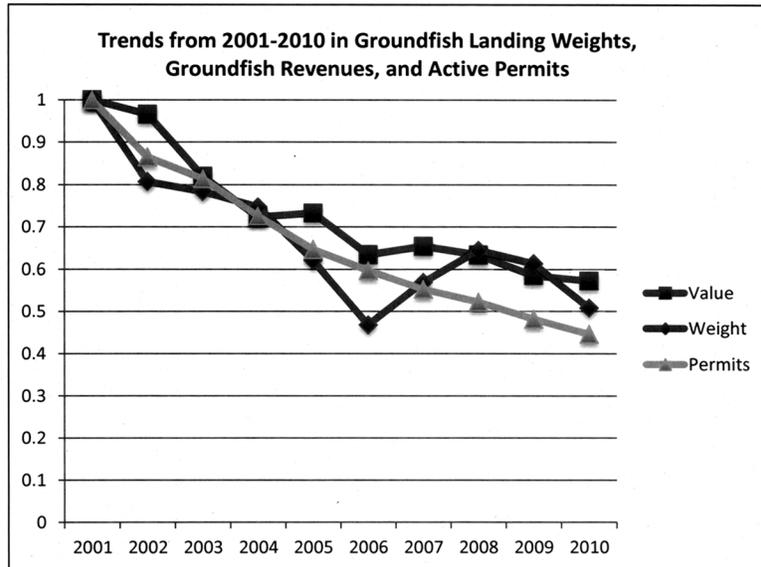
Data compiled and presented in the table below are taken from the Environmental Assessment prepared for Framework 45 to the Northeast Multispecies Fishery Management Plan.

Groundfish landed weight (lbs.), revenues (1999 dollars), and active permits; FY 2001–2009

Data	2001	2002	2003	2004	2005	2006	2007	2008	2009
Weight	103,418,293	83,477,219	81,023,479	77,281,552	64,269,318	48,387,002	58,924,437	66,644,624	63,477,001
Dollars	98,637,293	95,261,434	80,814,800	71,301,257	72,226,979	62,517,603	64,483,613	62,488,957	57,676,221
Active Permits	1,314	1,137	1,070	954	850	785	727	686	633

From Tables 55 and 58 in the Environmental Assessment, Regulatory Impact Review, Initial Regulatory Flexibility Analysis for Framework 45, prepared by the New England Fishery Management Council in consultation with the Mid Atlantic Fishery Management Council and the National Marine Fisheries Service; January 21, 2011.

Below is a graphic of the relative trends in groundfish landings, revenues and active permits between 2001 and 2010, where the values in 2001 are set at a baseline of 1.0. The values used to calculate trends between 2001 and 2009 were taken from Tables 55 and 58 in the *Environmental Assessment, Regulatory Impact Review, Initial Regulatory Flexibility Analysis for Framework 45* (New England Fishery Management Council in consultation with the Mid-Atlantic Fishery Management Council and the National Marine Fisheries Service; January 21, 2011). Trends between 2009 and 2010 were calculated from Tables 1 and 2 in the *Report for Fishing Year 2010 on the Performance of the Northeast Multispecies Groundfish Fishery (May 2010–April 2011)*¹ (Kitts *et al.*, 2011).



Reference: Kitts A, Bing-Sawyer E, McPherson M, Olson J, Walden J. 2011. Report for Fishing Year 2010 on the Performance of the Northeast Multispecies (Groundfish) Fishery (May 2010–April 2011). U.S. Dept Commer, Northeast Fish Sci Cent Ref Doc. 11–12; 44 p.

¹The absolute numbers generated by the Framework 45, and 2010 Year-end analyses cannot be directly compared due to a number of different characteristics of the analyses, including but not limited to: corrections/updates to the database between the analyses, slight differences in definitions of active permits, and revenues adjusted for inflation vs. nominal value. Additionally, Kitts *et al.*, (2011) addressed missing data for all 4 years analyzed (2007–2010), such as vessel trip reports that did not have accompanying dealer data, by imputing data based on similar trips for that vessel. Relative trends between the years can be compared, however, because within each analysis the data were treated the same between years.

Dr. LUBCHENCO. And so what we are seeing in the last year is, not surprisingly, a continuation of some of those changes. But there are also changes that are positive, specifically, that despite lower catch limits because of the requirements of Magnuson-Stevens, the changes were not as drastic as we would have predicted had they continued under the old Days at Sea program.

So I believe we are beginning to turn the corner. It's not happening overnight. It won't happen overnight. And, therefore, the importance of addressing those sectors of the fishery that are not doing well is paramount. And we would be delighted to receive the information that we need to document the declines, to have the secretary declare a disaster.

Senator KERRY. Thank you.

Senator Brown?

Senator BROWN. Thank you, Mr. Chairman.

Well, as you noted, and as you noted, Doctor, the decline of the New England fishing fleet from 2007 to 2010 is 17 percent. One-third of the vessels are inactive by—declared inactive by NOAA in 2010; a 15 percent decline in crew positions; a 46 percent decline in groundfish trips from 2007 to 2010.

Since I've been working on this issue, I'll tell you what—I've never seen—and I know Congressman Frank has been working on this a lot longer than I have—a complete lack of trust between any type of individual business and the Federal Government. It's, quite frankly, I think, beyond repair.

And I know that we had a hearing back in May, and, you know, your office—we had the hearing in June. In May, we asked for documents. No documents were provided until a couple of days before, and that was about 15 percent. Most were outdated. And NOAA and your office took the last day of the QFR period to return a few more documents. In late August, NOAA agreed to provide our staff an unredacted copy of the special master report. It was still redacted. So 5 months later, we still only have 50 percent of the documents needed to address a lot of our questions—Senator Carper's and my questions from the hearing.

And so, once again, the establishment—a reestablishment of trust and transparency—am I going to be getting the rest of the documents that we requested from our hearing any time soon?

Dr. LUBCHENCO. Senator, it's my understanding that the General Counsel for the department is working to set up an appointment with you to brief you on the information that we have.

Senator BROWN. Yes, but that's not the request. The request was to have the documents for the hearing, and it's 5 months later and we still don't have them.

Dr. LUBCHENCO. Senator, he will be discussing that very issue with you. That's not in my authority to do.

Senator BROWN. OK. I'll look forward to having that meeting. When Mr. Schwaab was here at the last hearing in lieu of you attending, I asked the question, you know, "What does it take to get fired at NOAA?" There was a shredding party; we know of the abuses at the—of New England fishermen by NOAA; mismanagement of asset forfeiture fund; and a \$3,000 luxury yacht that was bought with fishermen's fines. And no one has really been held accountable, and those who broke that public trust are still working

for NOAA. And since our hearing, have any disciplinary actions for these problems taken place?

Dr. LUBCHENCO. Senator, there are two laws that—under which we operate to deal with disciplinary actions when warranted. One is the Federal Personnel Law, and it describes two ways of dealing with issues. One is performance based. One is conduct related. The second law that is relevant is the Privacy Act. And because of that Act, it's—I cannot talk publicly about disciplinary actions that have been taken.

I can tell you that the people who were involved have been held accountable and that they have been dealt with to the extent possible under the authorities under which we operate.

Senator BROWN. Is that something the Counsel will be able to share with us as well?

Dr. LUBCHENCO. What counsel?

Senator BROWN. The attorney that you were referring to earlier.

Dr. LUBCHENCO. Oh. That's up to him to describe. I don't know what constrains what he can do. I'm telling you what constrains me.

Senator BROWN. I know that Attorney General Coakley made a 9/28 request for the documents related to these personnel decisions. Will you be providing those to her?

Dr. LUBCHENCO. Eric, can you answer that?

Mr. SCHWAAB. Thank you. So, Senator, as you indicated, that was just recently that we received that request. We are reviewing that. I think many of the same constraints that have challenged our response on some of these personnel related issues to date will also be in play as we review an appropriate response.

Senator BROWN. The fishing disaster declaration must be 80 percent revenue decrease for fishing failure, and that's internal NOAA policy guidance. It's not law or regulation. What's the basis for that 80 percent figure?

Dr. LUBCHENCO. Senator, that is the determination—the policy that was agreed upon or decided by the secretary with OMB's concurrence. It's the policy that we operate under to have uniform criteria across all different parts of the country so that there can be some uniformity to making decisions instead of just an ad hoc decision, yes here, no there, whatever.

Senator BROWN. And I know you've had meetings with NGO's in Washington and NOAA's leadership team has met with those folks to discuss fisheries policy. Have you held, or are you planning to hold meetings of this sort with any industry representatives in New England or in Massachusetts, in particular?

Dr. LUBCHENCO. Senator, after a report was issued about the meeting that I had with environmental groups on this issue, I asked my staff to go back through all of my records and pull together information about how many times I've met with fishermen and fishing groups versus environmental groups or individuals. And in the last year and a half, which is as far back as they got, I've spent 3 hours with environmental groups on fishing issues, and I've spent 40 hours with fishermen or fishing groups on fishing issues. So I think the story is actually quite the opposite—

Senator BROWN. I wasn't aware of a story. I was just wondering if you're going to be meeting with these folks and continue to meet

with them, because as I said earlier, there's a complete lack of trust between your agency and the fishermen here in Massachusetts, not only based on the finding issues that the special master put out, but, you know, the lack of desire to take into consideration any additional science on the catch share—maybe modifications in Magnuson-Stevens as well.

Dr. LUBCHENCO. Senator, I said when I first—in fact, in my very first hearing before the Senate Commerce Committee, I indicated that I thought the relationship that we had with fishermen in New England was pretty dysfunctional, which is why I invited the review by the special—by the Inspector General, and which is why we have requested a management review and a number of other things. This sounds like Twilight Zone or something here.

So I think the point is simply that I take the relationship with fishermen in the region—

Senator KERRY. I didn't tell you, but this place is haunted today. [Laughter.]

Dr. LUBCHENCO. I take that relationship very, very seriously, and we have been acting very diligently to turn this relationship around and have implemented a large number of actions to do exactly that. I think that we are in a better place than we were, but we have a long way to go. I believe that we should be working together collaboratively with fishermen.

And much of the actions that we have taken, especially with the expansion of the sector program, have been explicitly designed to simplify regulations, to get rid of unduly burdensome regulations, to give fishermen more flexibility and more control over their businesses. And that, we are seeing happen in just this 1 year in the expanded sector program.

Many more fishermen are taking advantage of these opportunities, are much more in control of their businesses. I think that we are beginning to see the light at the end of the tunnel, but it's a very long tunnel. And I am committed to understanding why some portions of the groundfish fishery are doing better than others. We are collecting all the information that we can to better understand that, and we are committed to helping to make changes in that fishery so that it works for as many fishermen as possible.

Senator KERRY. Thank you.

Can you all hear back there? You can. Good. All right. Everybody keep their voice up.

Senator Begich?

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

Senator BEGICH. Thank you very much.

Dr. Lubchenco, thank you very much for also being here for today's hearing. Let me—I mean, I don't have to tell you from Alaska's perspective, you know, we have, as Senator Kerry said, an enormous relationship to the fishing industry across the country. We have very abundant, sustainable, and profitable fisheries in Alaska.

About half the fish caught in this country come from Alaska. But that didn't happen overnight. It didn't happen easily. It was through a lot of shared sacrifice and a lot of issues. And why this

intrigues me a little bit is because the struggle that the eastern seaboard is going through, which Alaska probably went through in the 1970s, is what I would describe. It wasn't easy. We walked through a lot, and I would say to Senator Brown back then we had a lack of NOAA and Federal agencies.

But I wouldn't say it is beyond repair, because I can tell you I've been to many fishermen meetings. And back in those days, I was much, much younger, but heard plenty about them, and a lot of people thought it was beyond repair back then. But it was time that worked out the problems, but also communication and making sure that the agencies on a regular basis—and I appreciate the quantity of hours you spent. Sometimes quantity of hours is not as important as quality of time.

And so as we experienced in one hour down in Halibut Cove over a small little issue over—down in Homer over halibut charter issues, that time you spent there, I think, was very valuable, and the hour before with commercial fishermen was very valuable.

Let me ask you, if I can—because I recognize some of the challenges that are here in the New England area. But let me ask you some specific—kind of where you're headed. With the report that was done, the New England Fisheries Management Review, what is—there are several recommendations that were in that report.

As you move through that, how are you communicating back to the fishermen of this area? I guess that's—because in order to create that trust, that long-term trust—it is about communicating, at times more than you would have ever anticipated, just because of the way the industry works and the small boat operators to large boat operators. But how are you taking those recommendations that you've done in that report—and there's several on resources, on a variety of things. How are you communicating those back?

Dr. LUBCHENCO. Senator, thank you again for the opportunity to be with you in Alaska with fishermen—

Senator BEGICH. You say that with such a smile.

Dr. LUBCHENCO. I did actually—you know, that's—an important part of my job is to learn—

Senator BEGICH. You did a good job.

Dr. LUBCHENCO.—and listen by talking to the people who are on the ground, who are affected by our decisions, understand what's working and what isn't working. We heard an ear full, and, you know, that's important, and that flags key issues for us. It's equally important that we hear what's working, not just what isn't working, and we got both of those.

Senator BEGICH. Right.

Dr. LUBCHENCO. But relative to the management report, this report was yet another indication of our commitment to this region to better understand what's working and what isn't working. Mr. Schwaab initiated the request to an independent, neutral, third party to give us a very hard-hitting assessment of what's working and what isn't with respect to management.

The report flagged a large number of issues that are very serious with which we have already begun dealing. And one of them you hit squarely on the head, which is the need to significantly improve communications. We have initiated a number of efforts that I'm

going to ask Mr. Schwaab to describe very briefly in terms of the communication aspects of our response to this report.

But I want to simply flag the fact that there were two things: one, that we are making concerted efforts to improve communications in the region, to clarify roles and responsibilities, to have our regulations be in plain English and to simplify them. But if you would like to describe some of those—

Senator BEGICH. Go ahead, Eric. I'm watching my time here. So, Eric?

Mr. SCHWAAB. Thank you, Senator. Just then very quickly, one of the points that was made very clearly was that stakeholders, fishermen, others from industry did not know where to go for communications around various issues. So we stood up a unified communications team under the auspices of our regional office, and that team has worked much more aggressively to not only implement some of the steps that Dr. Lubchenco just spoke to, but also to provide a more cohesive and more transparent way to reach out and be available to the industry.

Senator BEGICH. Let me try this, if you could. To help me and maybe other members here, could you put together a schematic that shows me the tools you're using to communicate, how often you're communicating, and then of the recommendations in that report, what exactly—and time tables—you're accepting or doing on those recommendations? Can you do that for the committee?

Mr. SCHWAAB. Yes, absolutely.

Senator BEGICH. OK.

[The information referred to follows:]

Provide (a) a Schematic of tools used to communicate with fishermen, (b) information on what, when, and how we are improving communications including (c) how NOAA is communicating actions to implement the management review recommendations.

Over the past 2 years, NMFS expanded outreach and communication initiatives to facilitate the transition of multispecies fishery management to the sector allocation program (Amendment 16 to the Multispecies Fishery Management Plan). The "Review of the New England Fishery Management Process" (Management Review) was issued in April, 2011 at a time when NMFS's communication efforts had already improved. Outreach and communication initiatives continue to move forward, now informed by the findings and specific recommendations of the Management Review. This is an adaptive process and will continue to change as processes are identified, tested and evaluated as successful. Some of these tools were specifically developed for implementation of Amendment 16. However, they are now available and applied to other NMFS programs, as appropriate.

(a) Schematic of tools used to communicate with fishermen (items identified are specific to New England per the hearing subject):

Type on information communicated	By whom	Tools available and examples
<i>Regulatory Development</i>		
Notice of meetings (Advisory Panels, Committee Meetings, public hearings, Council Meetings) associated with development of regulatory actions for fisheries managed by the Council.	New England and Mid-Atlantic Fishery Management Councils, or Northeast Regional Office (Regional Office) for Secretarial and protected species actions	<i>Federal Register</i> , e-mail lists, website postings, mailings, press releases.
Requests for comments on regulatory analysis documents and proposed rules.	Northeast Regional Office	<i>Federal Register</i> , e-mail lists, press releases, website postings, mailings.

Type on information communicated	By whom	Tools available and examples
New England Council Meeting presentations and discussions	New England Fishery Management Council	Live streaming video, website with links to background and discussion documents.
Public hearings, scoping meetings	New England Fishery Management Council; Northeast Regional Office	<i>Federal Register</i> , e-mail lists, press releases, website postings, mailings, comments posted on website.
Notification of Final Rules/Regulatory Actions	Northeast Regional Office	Permit Holder Bulletins (formerly called small entity compliance guides) distributed by mail, e-mail lists, posted on Northeast Regional Office website, and press releases. As needed, includes compliance guides/fact sheets.
<i>Implementation support and compliance enhancement outreach</i>		
Quota monitoring	Northeast Regional Office	Fish-On-Line—allows fishermen to track landings per vessel trip reports and dealer reports. Sector Information Management Module to allow sector managers to monitor ACE transfers, sector allocation usage. Website access to quota monitoring information.
Data Review	Northeast Regional Office, Northeast Fisheries Science Center (Science Center)	Targeted data review sessions with sector managers.
Targeted audience informational support	Northeast Regional Office	Targeted telephone “town hall” meetings by NMFS leadership and staff. Sector member meetings. Sector manager workshops. Monthly Sector Manager Calls.
Implementation procedures	Northeast Regional Office	Public Informational Meetings. Examples: Public meetings held for the May 1, 2010, sector implementation; Protected Resources gear modification training workshops.
Transition training for fishermen, dealers, sector managers	Northeast Regional Office	Examples: Training workshops on monitoring and reporting for sector managers for implementation of Amendment 16 to the Multispecies FMP; Dealer meetings with port agents regarding new reporting requirements; Dockside training for protected species gear modifications (<i>eg.</i> , pingers for porpoise); and, summary outreach guides.

Type on information communicated	By whom	Tools available and examples
Operational training	Northeast Regional Office, Office of Law Enforcement	Training for sector managers and fishermen: Electronic Vessel Trip Reporting (eVTR) training workshops, webinar, website, and podcasts; Vessel Monitoring System training, including onsite support for fishermen and port agents; webinar for sector managers. Written operational guidelines. Examples: Checklist developed for captains on regulatory requirements such as monitoring and reporting for 2010 and 2011 fishing years; Electronic Vessel Trip Reporting (eVTR) operational summary guidance; Operational guidelines for protected resources (marine mammals and endangered species) regulations; Annual protected resources information sheet summarizing fishery-specific requirements issued to permit holders.
Frequently Asked Questions	Northeast Regional Office, Northeast Fisheries Science Center	Question and Answer sheets for complicated or controversial regulatory actions, scientific reports, or other NMFS products posted on Northeast Regional Office website. Question and Answer inserts prepared for industry publications
<i>Specific Information Requests</i>		
Permit histories, vessel upgrade information, quota monitoring information, regulatory requirements	Northeast Regional Office	Designated fisheries staff answer questions for sector managers. Developing designated staff telephone list for all Northeast Regional Office actions and programs.
<i>General Information Regarding NMFS Programs</i>		
Descriptions of programs, scientific and regulatory documents, educational materials, outreach notices, materials, compliance guides	Northeast Regional Office, Northeast Fisheries Science Center	Website. Industry outreach events (e.g., New Bedford Working Waterfront Festival, Maine Fishermen's Forum).
Timely program background information, program and regulatory context, and notices of ongoing or upcoming issues	Northeast Regional Office, Northeast Fisheries Science Center	The NOAA Fisheries Navigator, a bi-monthly insert into Commercial Fisheries News.

(b) What, when, and how is NOAA improving communications

Improving communications and relationships with industry is a priority, and we continue to actively find ways to develop a more consistent and focused message. We formed a Communications Team and developed an updated communications plan to support all Regional Office program staff who work with industry and the public, and promote outreach and collaboration between the Northeast Regional Office, Northeast Fisheries Science Center, New England Fishery Management Council and Office of Law Enforcement. Additional specific improvements are listed below:

- *Fish-On-Line* is a web portal that was introduced in early 2010 to allow fishermen holding a Federal fishing permit to access their vessel data and to track their landings information, including information reported by seafood dealers. Missing information or inaccuracies in the data submitted can quickly be identified for correction. In September 2011, a "News" feature was added to Fish-On-Line to provide an additional directed mode of communication to vessel owners.

- *Customer Service Training*—February 2011. Over 60 Northeast Regional Office and Office of Law Enforcement staff were trained in best practices for communicating with stakeholders.
- *Plain Language Campaign*—Launched in the spring of 2011, the Plain Language campaign is geared toward developing notices and operational guidelines for specific audiences that provide necessary information up front, rather than repeating technical and regulatory language in correspondence. Documents are more clear, concise, and specific for intended recipients. In September 2011, plain language training was provided to over 70 people from the Regional Office, General Counsel for Fisheries, New England and Mid-Atlantic Council staffs, and the Office of Law Enforcement. The initiative's results can be seen in recent permit holder bulletins and other outreach materials.
- We have hired a former commercial fisherman in New England to serve as our *first formal compliance liaison in the country*. He is working directly with the fishing industry in a non-enforcement capacity to improve communications and ensure all can comply with needed conservation measures.
- An *outreach survey of Sector Managers* was conducted in August 2011 to get their opinion on outreach tools and methods that NMFS uses to distribute information and obtain feedback from Sector Managers. Best practices for communication with sector managers are being followed based on their response, which supported a tailored approach to outreach and assistance, including in-person and live venues such as workshops, monthly conference calls, and one on one meetings with Northeast Regional Office staff, as well as Sector Vessel Operating Guide and Permit Holder Bulletins. For sector vessels, Sector Managers believed that Fish-On-Line and brief messages sent via the Vessel Monitoring Systems were the most efficient methods of information distribution to fishermen.
- *Evaluation of communication tools*—During September and October, 2011, we are informally discussing with fishermen their preferred format and medium for receiving information on regulations, the supporting science, notices of meetings, and outreach and training materials. Preliminary industry response suggests that fishermen find the NOAA Fisheries Navigator, a bi-monthly insert in a trade publication, informative and accessible. The development and distribution of new outreach materials will be immediately adapted in response to feedback from fishermen.
- A Website Working Group in the Northeast Regional Office is being established to *redesign the Regional Office* website to make posted information more understandable and easier to find. New webpages are being designed for posting as soon as NMFS' new website development system has been launched. In September, 2011, Northeast Regional Office staff were trained in the new system in anticipation of its availability in the near future.
- Northeast Regional Office staff are developing *processes to reduce the number of duplicate letters sent to industry*. A mechanism for determining individual preferences is being considered for vessels with multiple owners, owners with multiple vessels, and permit holders with multiple addresses.
- A web page/pamphlet to direct fishermen and other stakeholders to *specific points of contact within the Regional Office* is being developed. The information should reduce the number of times that calls are transferred before the appropriate staff person is reached, making it easier for people to get answers to specific questions.
- A *method to document data requests* and provide an approximate time-frame for a response was developed for use starting in late October, 2011.

(c) NMFS Communication specific to implementation of the Management Review Recommendations.

Week of April 26, 2011: New England Fishery Management Council meeting in Mystic, CT: This meeting kicked off a series of public meetings from Connecticut to Maine where NOAA's Assistant Administrator for Fisheries, Eric Schwaab, announced the specific steps the agency was taking immediately in response to the Management Review while a longer term plan was under development. The Review was made available for an informal 30-day public comment period, and the 23 comments were also posted online. A press release announcing the Management Review's availability and requesting comments was issued on the same day. Ongoing and short term actions identified by Eric Schwaab included commitments and procedures to:

- *Improve collaboration with partners on science, cooperative research with industry and reviews of science programs:* Collaborate with research and academic institutions and fishermen to maximize research funding to address critical questions facing New England fisheries. Prior to making FY12 research funding decisions, conduct an expedited mid-term review of the 2009 Strategic Plan for Cooperative Research involving all regional cooperating agencies and academic institutions.
- *Improve communications efforts:* Enhance and integrate communications staff at the Northeast Regional Office. Simplify public information explaining NMFS programs and regulatory actions through tools such as the *Navigator*. Investigate opportunities for direct communication with fishermen and other constituents such as Fisheries Information Centers and bi-weekly sector manager calls.
- *Clarify roles and responsibilities of NMFS and the Councils:* Update the regional office and science center operating agreement to reflect report recommendations. Through the Northeast Region Coordinating Council (made up of the region's fisheries executives from the New England and Mid-Atlantic Councils, the Atlantic States Marine Fisheries Commission, NOAA's Northeast Regional Administrator and Northeast Fisheries Science Center Director) complete efforts to clarify NOAA and Council functions and staff roles through new operating agreements.
- *Improve data management systems:* Integrate and consolidate fishery dependent reporting/collection systems and the underlying data management systems within the region. Working initially with voluntary multispecies sector participants to transition from paper to electronic logbooks to speed data processing, and reduce errors.

April 28, 2011: Stakeholder Town Hall Conference Call: NOAA's Assistant Administrator for Fisheries, Eric Schwaab, presented the same information discussed at the New England Fishery Management Council Meeting, along with Preston Pate, the primary author of the Management Review, on a Town-Hall style conference call. The call included a question and answer period.

June 23, 2011 Press Release: The NMFS Northeast Regional Administrator, Pat Kurkul, and the Acting Director of the Northeast Fisheries Science Center, Frank Almeida, issued a joint press release reviewing and lauding the New England Fishery Management Council's response to the Management Review and identifying NMFS ongoing efforts to respond to the Review.

June 23, 2011 New England Fishery Management Council meeting in Portland, Maine: Regional Administrator Pat Kurkul presented the Northeast Region's preliminary response to the four priority areas, listed above, identified in the Management Review. An overview of the developing regional work plan was discussed.

September 23, 2011, New England Fishery Management Council meeting in Danvers, MA: New England Fishery Management Council staff presented a straw man Communications and Outreach proposal to the Council and identified points supported by the Council Executive Committee. Regional Administrator, Pat Kurkul, presented an overview of the integrated Regional Office and Northeast Science Center Draft Work Plan responding to the Management Report. The Work Plan was developed by the Northeast Regional Office with input from the Northeast Fisheries Science Center and the New England Fishery Management Council. In this Work Plan, actions are identified to simplify the management process, improve communications with the public, broaden collaboration with stakeholders, consolidate fishery data management and improve communication and collaboration between staff at the Northeast Regional Office, Northeast Fisheries Science Center and New England Fishery Management Council. The Draft Work Plan is posted on the Northeast Regional Office website and was distributed with a cover letter by Pat Kurkul at the New England Fishery Management Council Meeting.

Provide a detailed summary of how NOAA is implementing the management review's recommendations.

NMFS Response to the New England Management Review

Over the past several months, NMFS and the New England Fishery Management Council have been working to address the priority recommendations identified by the Management Review: (1) simplify governance; (2) simplify communications; (3) improve science collaboration; and (4) maximize collaboration. As part of our response to the review, we have made significant progress toward addressing several of the concerns raised by the review, as summarized below, and are tracking

progress through a detailed action plan. In addition, based on requests for more robust follow up and stakeholder involvement in the reforms, NOAA will contract with an independent group to initiate a participatory evaluation process of the management reforms underway.

Simplify Governance—The report states that the fishery management process can be difficult and that in some cases regulations have become overly complicated and redundant. To address these concerns, NMFS developed a draft Operating Agreement with the New England Fishery Management Council and NOAA's Northeast Office of General Counsel, to clarify roles and responsibilities, strengthen collaboration, simplify the governance structure and process, and highlight opportunities for public input. We are also exploring ways to simplify/clarify regulations through a trial "plain language approach" for rulemaking and by addressing regulations that are known to need greater clarity.

Simplify Communications—NMFS has made improving our communications and relations with industry a top priority. Please see the response to question 1(b) above for further details.

Improve Science Collaboration—This category covers a range of topics such as analysis of our data systems, cooperative research, stock assessments, and social sciences and economics. In response to data challenges, NMFS requested a data system review which began on September 26, 2011 to find ways to improve and streamline data management and collection. This review should be completed by the end of November, at which time we will assess recommendations and begin making improvements to our systems. We are also seeking ways to improve the accuracy of vessel trip reports and speed data processing. To further this goal, in June we made electronic vessel trip reports available on a voluntary basis to members of the groundfish industry.

NMFS is working with stakeholders to ensure that our Cooperative Research Program is responsive to industry, management, and scientific priorities. In September, we completed a series of outreach meetings with fishermen and scientists to gather input and improve the program's transparency. By the end of November we will update the program website to provide more information to stakeholders on funded projects and increase the transparency in the funding process. To improve stock assessments, we are now transitioning to a new assessment review process that has already been approved by regional leadership (including both the New England and Mid-Atlantic Fishery Management Councils). This process will take advantage of the expertise available in the Council Scientific and Statistical Committees and result in a more efficient and less redundant review system. We will also ensure that NMFS social scientists and economists are an integral part of the fishery management process by engaging them in the earliest discussions of proposed management actions. We are conducting new and expanded analyses of the impacts of regulations on regional fisheries and coastal communities and staff participated in a National Fishery Management Council Scientific and Statistical Committee Workshop during October 4–6, where one focus was on improving the integration of social science with the Council process.

Maximize Collaboration (New England Fishery Management Council Lead). The Council is making progress on its pledge to take responsibility for findings in the report applicable to their process. Issues to be tackled by the Council include redesigning Council meetings to be more open and collaborative and creating a performance management system to track the progress of Council decisions and capture lessons learned.

Mr. SCHWAAB. And if I could just quickly add one specific enforcement, as we've shifted to a compliance strategy, one of the breakthrough strategies we've employed here is the hiring of a compliance liaison within our office of law enforcement in the region to be available up front for fishermen.

Senator BEGICH. Very good. Let me ask you on your stock assessments issue—I noticed in your testimony you had some challenges that—I know in Alaska, we—you know, if it's 20 or 22—I can't remember the exact amount of stocks that you assess every single year. What's the stock assessment here—frequency on the different stocks? How often do you—because, as you know, without that proper stock assessment, you're not going to have the best numbers, and you'll take the lowest number in order to be more con-

servative in the analysis. So help me understand. On the stocks that are analyzed here in New England, how often do you do the assessments?

Mr. SCHWAAB. Thank you, Senator. We're not on the annual cycle that they are in Alaska. We do have a relatively good picture to paint here in the region—generally, a two to three-year cycle for the most important stocks. One of the things that we have been working on through the regional office—through the science center here is a streamlined assessment process that will allow, for example, the SSC for the council to be engaged up front so that we can move through more quickly for some of the higher priority stocks.

Senator BEGICH. So when you—if I can just take one more second.

Senator KERRY. Please take extra time.

Senator BEGICH. If you—in your comments again, under Challenges Remaining, you mention in the fiscal 2012 budget this is one of the challenges. So can you again prepare for us here—what are those specific requests that are necessary to have the frequency of the stock assessment or the additional accuracy that you need?

Again, I think the reason we've been successful—again, I think it's 20 or 22 different stocks that you assess every year. That is huge, and that's why, you know, we take a more—the halibut is the big challenge right now. I'm sure we'll have another challenge tomorrow in Alaska. But that helps us really understand, and it brings another trust level to the fishermen that's critical.

So can you detail that out at some—obviously, we're in the middle of that budgetary process now. Could you prepare that, either one of you or both of you, for the Committee?

Dr. LUBCHENCO. Senator, we'd be happy to do that. I would note that there are 20 stocks just in the groundfish fishery in New England, and then there are a lot of other stocks that are fished. So it is very complex. It is also, as I think you're alluding to, resource dependent. And so thank you for that invitation, and we will be happy to comply.

[The information referred to follows:]

Provide information on the amount of resources required to do stock assessments in the Northeast at an ideal frequency.

NOAA has developed a revised approach for producing stock assessments that we have begun transitioning to. The new approach aims to provide managers the information to adjust annual or biennial catch limits in response to changing stock conditions, so industry can take advantage of healthy stocks faster and not overfish stocks.

Thanks to additional funds provided by Congress, over the last 4 years NOAA Fisheries has almost doubled the number of stocks assessed annually in the Northeast region, conducting an average of 21 stock assessments per year since 2008. At present, this means individual stocks are being assessed every 3–4 years. In the preceding 4-year period (2004–2007), the Northeast Fisheries Science Center conducted an average of 11 stock assessments per year. Over the past 4 years, the Center has received an average of \$20.8 million to support stock assessments through surveys, at-sea observers, biological sampling, age determination of fish, stock assessment scientists, and the peer review process. NOAA Fisheries is continuing to plan for increasing the rate of assessments to a frequency of every 1–3 years, for an average of about 30 stock assessments per year. Based on the needs of management and the biology of the stocks, this is the optimal biological and regulatory frequency at which to assess the status of these stocks. To achieve this requirement and to continue to make research advances in the underlying stock assessment science, the funding increase proposed in the President's budget would be required, and this

would help support the additional scientists necessary to meet both scientific and management needs for stock assessments in the New England and Mid-Atlantic.

Comparisons between the stock assessment process in Alaska and the Northeast are instructive. The assessment process in Alaska routinely updates the status of all 35 stocks per year. These stocks are managed under three separate Fishery Management Plans (FMPs) and one Council. All stock assessments are “updates,” and are prepared annually over a 4–6 months period including 2 sets of meetings of the Plan teams and the Scientific and Statistical Committee to peer review the assessments, and then to provide Annual Biological Catch (ABC) advice to the Council. A strong and intensive internal review process ensures that the external review process is efficient and sufficient to answer the requirements for the Scientific and Statistical Committee (SSC) and managers.

In contrast, the 56 stocks in the Northeast are managed by two Councils and the ASMFC under 14 separate FMPs, with the NMFS providing revised assessment advice for up to 21 stocks per year, including both benchmark assessments and assessment updates. The assessment process for benchmark assessments typically requires 2–3 weeklong meetings for each stock, plus a weeklong review by the Northeast Regional Stock Assessment Review Committee over a span of 4–6 months. Each benchmark assessment is first followed by meetings of the stock’s Plan Development Team, and then by a meeting of the SSC to translate the assessment advice into annual ABCs. Only 4 to 6 stocks can be benchmark assessed per year under this schedule. An additional 10 to 15 stocks have annual assessment updates prepared, with the SSCs acting as a supplemental peer-review body.

Much of the difference in the assessment schedule between Alaska and the Northeast is a result of the general differences in the status of fishery stocks in the two regions. Stocks that are overfished or where overfishing is occurring generally require implementation of different management measures, and the assessments require greater detail and peer review. Such measures increase the amount of time needed to conduct assessments to verify that the measures are sufficient or even necessary. Overfishing is an uncommon condition for the Alaska stocks; no stocks are listed as experiencing overfishing and two are overfished. In New England, on the other hand, only 1 groundfish is experiencing overfishing, but 13 of the 20 groundfish stocks are currently overfished.

Senator BEGICH. And, I guess, the last quick question on personnel issues—I understand as a former mayor how you have to manage that very carefully. But I would ask that, if necessary—and I don’t mind doing it, and I’ll just share it with the folks here—happy to do a closed meeting just to give us an accounting of what happened. And I’ll leave that to your counsel to work maybe with the Subcommittee’s counsel to make sure—so everyone can be satisfied with accountability issues on that. And I’ll be happy to work with you.

Dr. LUBCHENCO. That’s exactly what the General Counsel has offered to do.

Senator BEGICH. OK. We would be happy to assist the members who are interested.

Thank you.

Senator KERRY. Thank you very much, Senator Begich.

Let me just emphasize this stock—and if you want to establish trust—nothing has frustrated us more over the last years—I mean, decades—than the science. And the fishermen will tell you that, that they’re just—you know, they see something different. There’s a huge doubt about the basis of some of the decisionmaking. And to have a difference of a three-year—or a two-year or three-year, but generally three-year—versus every year is a huge deal. And I know it’s resource dependent, and that’s something that is—you know, we’ve got to join in the fight to get those resources.

I just want to say—I really want to emphasize how important it is that the Chairman of the Subcommittee has come up here. I used to chair that committee, and I know it’s critical to Maine, to

California, to Washington, Alaska, all of—Louisiana, all of our coastal areas. It means travel and time out on the schedule of the Chair, but I am very, very appreciative to Senator Begich for coming up here to listen to us today.

Congressman Frank?

**STATEMENT OF CONGRESSMAN BARNEY FRANK,
U.S. REPRESENTATIVE FROM MASSACHUSETTS (4TH DISTRICT)**

Mr. FRANK. Thank you. I want to say that I have to express my agreement with Senator Brown, not that I'm reluctant to agree with Senator Brown, but I wish it wasn't on this point—mainly that there is a pretty complete sense on the part of the fishermen in Massachusetts that they face a hostile administration. And that—I have to say I share their view.

And, Dr. Lubchenco, I want to be honest with you. In our interactions, you have given me the impression that you're almost resentful and resistant of what we want to do. And I am not the role model for warm and cuddly. I understand that. I'm not being—when we talked about the investigation into abusive law enforcement, I remember having to argue with you about including after a deadline some other people we thought were relevant, and I will get back to that at the end.

But I—part of it has just come from your testimony. You say on page four, "Revenues are up for some but not all fishermen." And then you say the average New England ground fishermen earned 16 percent more per pound. You then say in New Bedford, the increase was 20 percent. Is that per pound?

Dr. LUBCHENCO. No.

Mr. FRANK. That's overall?

Dr. LUBCHENCO. Overall.

Mr. FRANK. But in the report NOAA issued—oh, and the ground fishermen—is that for groundfish or for all their revenues?

Dr. LUBCHENCO. The 12-month report was for groundfish.

Mr. FRANK. Because the report that NOAA issued that—commissioned from the Northeast Fisheries Science Center says the total catch for groundfish was down to 81 million pounds. The drop in catch was partially offset by an average price per pound. So revenues fell 2 percent from \$85 million to \$83 million. So overall revenues—but that's not in your testimony. Your testimony cherry-picks what looks good and leaves out what's not good, and that's not building trust.

Why would you, in talking about revenue, not have noted, however, that revenues overall were down, and that the per pound increase was in gross offset so that we had a net revenue loss of 2 percent? Wouldn't that have been relevant to your part on revenues?

Dr. LUBCHENCO. Congressman, the 12-month report has a lot of information in it, and it has—you can read it a lot of different ways.

Mr. FRANK. I'm sorry. I have to—this is your report, and it says revenues fell 2 percent. That's not—there are no two ways to read that. This is an example of what I mean. You highlight where revenues went up per pound, but the fact that revenues overall went down wasn't there.

By the way, fishermen may be one of the few people who are prepared to work harder to get less per pound. I mean, I guess if they were purely selfish, they would say, "Good. Cut the catch and we'll raise the price." But these are people who would prefer to be able to catch more.

I also want to get back to the assessment issue, because we have an example of that. The one generally successful area of fishing we have here is in scallops. And that's an example where information that I was given by the fishing industry, the scallopers in New Bedford, Dr. Rothschild and the people at SMAST—we had to overcome resistance within the—you weren't there at the time—and get the Secretary of Commerce to use his authority to give us more scallops. And the fishermen were right, and some of the more extreme critics of the fishing industry were wrong. And what I'm hoping is we can try to do for groundfish what we did for them there, and that was partly because the science is weak.

Now, one of the—because I think the catch is the essential issue. One of the key points is—in Magnuson-Stevens, which I in the end voted against—and part of it was this 10-year fixed rate for rebuilding. Now, with regard to the Canadian boundary, with your support, we amended that, right? So we do not have the 10-year fixed rate. You have the authority to make exceptions?

Dr. LUBCHENCO. Correct.

Mr. FRANK. Is that working well, do you think, or is it too early to tell?

Dr. LUBCHENCO. I haven't seen the latest information on that. Do you know, Eric?

Mr. SCHWAAB. It did, Mr. Frank, provide us some increased flexibility—

Mr. FRANK. I understand. But is it working well?

Mr. SCHWAAB. It is working well—

Mr. FRANK. All right. If that's working well, why don't you do it for the whole bill? Why do we have that exception, because—well, let me ask you—the 10-year with no exception, right—is there scientific justification for that that you can show me somewhere—10 years, fixed, no exceptions?

Mr. SCHWAAB. No.

Mr. FRANK. OK. So we have—and you had previously acknowledged, Dr. Lubchenco, at a hearing we had on the waterfront that it's there because it's in the statute. In fact, we made an exception. We appreciated it. We had a bipartisan agreement—Senator Snowe and others in the Senate, Senator Brown, Senator Kerry. We got that changed for our Canadian boundary, and you say it's working well.

Why wouldn't you then support giving yourself the same flexibility with regard to the 10-year period, in general, in our fishery that we have with the Canadian boundary?

Dr. LUBCHENCO. Congressman, there are exceptions that are allowed. Those are specifically identified—

Mr. FRANK. But not the same as in the Canadian boundary.

Dr. LUBCHENCO. That's correct.

Mr. FRANK. Would you support equating the overall with the Canadian boundary, that list of exceptions, which would still be under the jurisdiction of—

Dr. LUBCHENCO. So I think the exceptions that are warranted are ones where the life history of the species—

Mr. FRANK. I'm sorry, Doctor. Can I get an answer to a fairly straightforward question? Would you support putting into the statute the same exceptions and the same flexibility with regard to 10 years, in general, that you have and that Mr. Schwaab says is working well on the Canadian boundary issue?

Dr. LUBCHENCO. Where there is a legitimate biological reason, yes.

Mr. FRANK. No, no. But we have to amend the statute. So then you would support amending the statute, because, presumably, in the main—in the trans-Canadian boundary situation, are the exceptions appropriately limited?

Dr. LUBCHENCO. I don't know what the basis is in that.

Mr. FRANK. You don't know the basis of the statute that you're administering?

Dr. LUBCHENCO. So I—I do not. But I think Eric does.

Mr. FRANK. Well, Mr. Schwaab?

Mr. SCHWAAB. Yes, thank you. So the basis there was not to disadvantage U.S. fishermen where through a transboundary agreement we were dealing with an international partner who was on a different rebuilding timeframe. So it was very explicitly intended—

Mr. FRANK. Does that time frame—but is doing that—is that going to be deleterious to the rebuilding?

Mr. SCHWAAB. It flattens—

Mr. FRANK. No, I didn't intend—

Mr. SCHWAAB. It certainly flattens the rebuilding trajectory—

Mr. FRANK. Is that deleterious to the overall preservation of the stock?

Mr. SCHWAAB. It certainly could be deleterious to the ability to meet that objective.

Mr. FRANK. But it's working well, you say.

Mr. SCHWAAB. I would say that—and, again, in a place where we have an international partner with a different rebuilding trajectory, we certainly did not want to disadvantage U.S. fishermen by putting them on a—

Mr. FRANK. I understand. But, again—and I'll give you—I'm trying to ask a fairly straightforward question. You seem to be reluctant to say things that might be advantageous to the fishery. And so I'm going to close with this, with a little bit of extra time, if I might. There has been some conversation about a task force. There were some recommendations that came from Pate and others.

There is a lack of trust, and let's just be very clear. There aren't enough law enforcement officials in the world, fortunately, particularly in a free society, to enforce laws over the vehement objection—or not objection, but in the face of such distrust. Law enforcement would be better if we had more cooperation along those lines. I'm hoping we will go ahead with getting the Coast Guard ALJs replaced. We were promised that, and, apparently, it hasn't happened yet.

But I think a task force to work with you of stakeholders would be very helpful. Would you be supportive of a task force being appointed of stakeholders who could take some of these areas of

agreement, improving the science, and have some input into the process by which that is done on a regular basis?

Dr. LUBCHENCO. We have consistently been reaching out to fishermen and creating mechanisms to do that.

Mr. FRANK. That's a straightforward question. Would you be supportive of a task force? Why can't you give me a straight answer? It could be no. It could be yes. But would you be supportive of a task force to do that? That's not a hard question. You don't have to hire somebody to take the SAT for you to answer it. It's very straightforward.

Dr. LUBCHENCO. Congressman, we actually have such a mechanism.

Mr. FRANK. Is that a yes or a no, Dr. Lubchenco?

Dr. LUBCHENCO. It says we already have it. That's what the Council is. That's what the Council is supposed to do.

Mr. FRANK. OK, yes. But there's some concern that it hasn't worked as well, and they would like to go beyond just this rigid appointment to the Council. So the answer is you would not be supportive of a task force that would be broader in scope to work out these—

Dr. LUBCHENCO. I believe we have a mechanism. We need to make it work better. It's one that was created by Congress. It's one that works in other parts of the country. One of the things that we have committed to doing is to having better clarity about how the Council process works, bring even more transparency and openness to the Council process. That is the appropriate mechanism, and I'm totally supportive of it.

We do need to make it work better. Fishermen need to have trust in it. They need to know exactly what they're doing. They need to participate in it, because that's the body that is developing the fishery management plans.

Senator KERRY. Why is it not working?

Dr. LUBCHENCO. The Council process could work better. I believe that one of the challenges in New England is how diverse the industry is. And with that diversity, there are always going to be individuals that don't agree with a particular decision. But I believe they need to have more confidence in the process and fully participate in the process.

One of the challenges in New England has also been the complexity of the regulations, and that was the Council's doing, and we are working with the Council to simplify those regulations. I believe that the sector management program is actually helping significantly to simplify regulations and to give fishermen more control over their businesses.

There are other arenas in which we need to simplify regulations further and make it clear what the regulations say. So some of the things that we have set in motion are mechanisms for individuals to know where to go to get the information. And Eric just described one of those in terms of having one-stop shopping, one easy place to go where you can get answers, having fishermen who are knowledgeable be able to help participate in sharing information.

And these changes don't happen overnight. These are changes that I believe have been a long time in coming. I would much rather be in a situation where we have good collaborative interactions,

even though I don't—I'm not naïve enough to believe that everybody's always going to agree with everything—but if we can trust the process, and fishermen can trust the process.

The fact that the economic situation is so serious, and it has been on the decline for so long puts us in a very, very challenging position. It's hard for people to trust a process where the economics stink for many of them. And I totally understand that. That's why we are committed to turning things around. And I believe that, finally, we are on a path to do that.

For the first time ever, we have catch limits and accountability measures in place, and we have mechanisms to track those changes. And they are beginning to work. The stocks are beginning to be rebuilt. We have seen increases in catch limits in 12 of the 20 groundfish stocks this year because the rebuilding has begun. We're turning the corner, but we have a long, long way to go. And I would like us to be moving in a direction that works not just for a few, but for all of the fishermen.

That's what we are committed to continuing to do, and part of that means rebuilding relationships with fishermen. We are on a path to do that. We have a long way to go, but we're committed to it.

Senator KERRY. Congressman Tierney?

**STATEMENT OF CONGRESSMAN JOHN F. TIERNEY,
U.S. REPRESENTATIVE FROM MASSACHUSETTS (6TH DISTRICT)**

Mr. TIERNEY. Thank you, Senator.

Thank you to all the senators, for inviting us here to participate in this today and for coming yourselves on that.

Dr. Lubchenco, I think the issue of lack of trust is foremost in the minds of many, particularly in the Gloucester region on that. The enforcement programs, the operations, and the way they've been exercised in the past have led to that. I think the Inspector General's report leaned heavily on the lack of transparency and accountability for the programs.

It would have gone a long way for our fishermen if there had been more of a response in indicating whatever happened to the people that were responsible for, as the Inspector General said, common abuses and misuses of power, rampant mismanagement throughout the agency, specifically in the Office of Law Enforcement in the New England region. When they then turn around to find out that the former head of that division still is with NOAA, still is pulling down \$155,000 of taxpayer money, and seemingly people cannot get an answer as to what disciplinary process was followed, if any, in that situation and why wasn't more done in terms of holding people accountable—I understand that you want to say that the Privacy Act sort of prohibits that. But you have been requested time and again by the Oversight and Government Reform Committee of the House, then Chairman of the Subcommittee, Dennis Kucinich; the Resources Committee in the House, Walter Jones, for that information, either in Executive Session or in documents if you thought they were classified for some reason, and there has been nothing forthcoming.

So can you give us some assurance here today that you're going to accept Senator Begich's offer to make sure that your Counsel

produces that information and those answers to the House and to the Senate?

Dr. LUBCHENCO. Congressman, the information that the General Counsel for the department is able to provide by way of a confidential briefing, he will do so. That is not my choice. That's not my decision. This is up to him. And he has offered to do some confidential briefings.

Mr. TIERNEY. When did he offer to do that? Because he didn't offer to Representative Kucinich, and he apparently hasn't offered it to Representative Jones, and he hasn't responded to their requests for it. And, obviously, the request through you—you've not been able to persuade him to do that because we've seen no action on that. So when is it that he supposedly did that, and when can we expect him to follow through?

Dr. LUBCHENCO. Congressman, I don't know.

Mr. TIERNEY. You know, part of the information issues—it was a good thing that you went up and apologized to some of the fishermen and entities that had been involved and the findings had been made by the judge as well as the Inspector General on that. But there was some disgruntlement, obviously, that they thought that you might also answer some of the questions that they presented that day, and there was disappointment that you apparently would not. I wasn't there. I only got the feedback from talking to the participants on that.

But when they wanted to ask questions such as why weren't their legal costs—the fact that they don't like them, and do they get reimbursed for that. They weren't given the answers and any satisfaction. Can you, at least today, say that you will try to work to expedite their requests for an answer on whether or not they can be compensated for their loss of legal costs during that entire situation where the finding was made that there was mismanagement throughout the agency and where there were abuses or misuses of power?

Dr. LUBCHENCO. Congressman, we will commit to clarifying what we can and can't do.

Mr. TIERNEY. Well, that's real helpful.

[Laughter.]

Mr. TIERNEY. I mean, this is part of it. Let's be serious on this, you know. And you and I have had a thing going back and forth here like that and parts of that. That's not an answer that's very helpful or it doesn't seem very open. So we talk about openness and transparency, and then you give an answer like that. You know, you either agree that there ought to be—you know, somebody will look into that issue and try to be somewhat sympathetic to the fact that huge legal costs were incurred by these people, who in the end were found to have been rather poorly treated, and that you'll see and, you know, with affirmative action you'll try to see that there's some resolve or at least expedite their claims or you won't.

So will you try to at least see that their assertions have an answer that'll be expedited and they'll get some satisfaction one way or the other?

Dr. LUBCHENCO. Congressman, you asked if I would commit to—if I would find—if I would look into it, and I said yes. That's what I'm saying.

Mr. TIERNEY. Well, yes is much easier to understand than what you said the first time, and I appreciate that, that you will. There's now a question about whether or not the rulemaking process itself in some of the agencies—in NOAA, in NMFS, in the New England Fishery Management Council—should be reviewed on that. A request has been made by Congressman Frank and by me that the Inspector General consider looking into that.

Will you cooperate with somebody reviewing that situation so that we can have further confidence that the process itself is legitimate and is something that can be supported by people so we can rebuild some of the trust?

Dr. LUBCHENCO. Of course.

Mr. TIERNEY. Can you—just on the more positive side of the issue, you had mentioned that you were in favor of looking into better monitoring approaches and cost-effective ways to do that on the monitoring. Can you expand on that a little bit to let us know what the fishing community might expect for some relief in that area?

Dr. LUBCHENCO. I think there are two issues with monitoring, Congressman. One is what does it cost, and, two, who pays? We have paid the first two months of the monitoring costs. We've also redirected funds to help minimize—to lessen those costs. I am supportive of finding ways to slow down the rate at which the industry is covering those costs in a way that is sensitive to the realities of the economic situation now.

I'm also in favor of figuring out ways to lessen the total cost. And we have in progress now pilot projects to understand better the possibilities of using electronic monitoring, for example, to make the monitoring cheaper. This is a pilot that is still underway. I'm guessing that it's going to be easier to utilize approaches like monitoring—electronic monitoring for some fisheries, some gear types than others. For gill net, for long line, I think it's going to be easier to have a camera be capturing identity and size of fish as they go by than for a trawl where there's just a whole bunch coming in at once. So this has to be somewhat gear specific.

But we are working to figure out how to bring those costs down, and we'll continue to do so. And this is a collaboration that is underway, and we believe that—we understand the urgency of moving ahead with this judiciously, which is why we've initiated these pilots.

Mr. TIERNEY. Thank you.

Senator KERRY. Just a comment quickly to the Congressman that in the conservation act that I'm working on with Senator Begich, Senator Snowe, and Senator Mikulski, we have the fee fairness act that I introduced a year ago as part of it, which will empower the reimbursement of legal fees. So I want people to know that we're trying to do that through the statutory process, and, hopefully, we can get that done.

Dr. LUBCHENCO. Mr. Chairman, could I add one more quick—

Senator KERRY. Yes, please.

Dr. LUBCHENCO.—item to Congressman Tierney's question. I would note that our ability to help defray costs for monitoring is partly a resource issue for us, and the catch share line item in our budget is what we use to do that. And so if there is desire on the part of the New England delegation to help us cover those costs for

longer, we need help making sure that we have the resources to do that.

Senator KERRY. And I would remind everybody here that this comes into the discretionary portion of the Federal budget, which took \$1 trillion worth of cuts over the course of the last few weeks. So people need to relate as they go out in their communities—this hue and cry about chopping away everything that matters to people, which is part of what's going on down in Washington.

Congressman Keating?

**STATEMENT OF CONGRESSMAN WILLIAM R. KEATING,
U.S. REPRESENTATIVE FROM MASSACHUSETTS
(10TH DISTRICT)**

Mr. KEATING. Well, thank you, Senator. And I'll just say, as someone that's fresh to Washington in respects, it's extraordinary, and I want to thank—there are three senators here, three House members. It's hard to do that in Washington.

Why is that happening here? Because I don't think there's any inability from the fishermen communicating to us. We're hearing them, and that's why we're here. And that communication is being heard, and it's fundamental.

Now, I just had a couple of thoughts, and one of them—I was just listening to the testimony so I could bring something new to the questioning, because when you're last in line here in talking, most everything has been addressed. But, you know, in the larger picture, when it deals with international issues, you're flexible, because you want to do the best for the fishermen that way. So you've adopted one policy.

When it comes to the bureaucracy and your funding, well, that comes first. So you can't go to 1 year versus three, and maybe we should be dealing with having a hearing on how we get to monitoring every year.

But one of my committees is the Small Business Committee, and what I'm finding, listening to the folks in my district that I represent, a broad array of people, some of them more amenable to the rules than others—but the one thing that's lost is where's the flexibility for a small business. And most of these people are small businesses. Our growth is going to be—65 percent of our growth has been through small businesses.

And, you know, maybe there are things that can be worked out internationally, when you're working at it. Maybe there's things that could be done with funding to accelerate the monitoring. But I'll tell you what's gone forever. It's not just the stocks of certain fish have been depleted. Small businesses have gone.

So the same flexibility that's there for something else isn't there when the stakes are small businesses going under and it's never coming back. That will be a permanent depletion, and that's something we can't afford to have here regionally. It's something that's going to hurt us economically.

And I just want to make that point, because you were nodding your head when we were saying, well, you used the most conservative figures. Now, is that conservative based on the effect on the species, or is it the most conservative as to how it affects these small businesses? When you say conservative, are you being con-

servative to make sure you're not doing things so these businesses are depleted, or is it conservative based on the stock of a certain species?

Dr. LUBCHENCO. Congressman, thank you for recognizing clearly that fishermen are the consummate small businessmen. They really are. And much of our approach in the last few years has been explicitly designed to give them more flexibility, to relieve them from overly burdensome regulations, so that they can be small businessmen without their hands tied. The sector program is designed to do that, and we are beginning to see fishermen respond.

Mr. KEATING. Could you—because my time is—sorry to interrupt, but—

Dr. LUBCHENCO. When we—

Mr. KEATING.—I'm going to be cut short of time, too, but could you answer the conservative question first?

Dr. LUBCHENCO. That's what I'm—when we set the limits, the catch limits, for different species, that is constrained by the legislation, the Magnuson-Stevens Act, and it is explicitly designed to ensure that overfishing doesn't happen. And so the limits are set on each stock with the idea of having as much fish as possible to fish now without undermining the ability of fish to have for later. So it's a balance between the present and the future.

Mr. KEATING. A balance.

Dr. LUBCHENCO. Correct.

Mr. KEATING. Then where does the term, conservative, come from?

Dr. LUBCHENCO. So I'm not sure in what sense you're using that. We conserve the stocks.

Mr. KEATING. Well, you were nodding your head when people were saying that when you're looking at the scientific data, you look at it with the most conservative lens, for lack of a better term. I was listening to that. Maybe I was not—

Senator BEGICH. I asked that question, or made that statement.

Mr. KEATING. Thank you.

Senator BEGICH. When you do a one to three-year spread—when you do assessments every three years, your odds are you're going to take a much more conservative approach because you don't have enough assessments every year.

Dr. LUBCHENCO. That's correct.

Mr. KEATING. Well, in the absence of more assessments, couldn't you just be balanced, the way you are with these other factors, just more in the middle?

Dr. LUBCHENCO. So we are required to utilize the best available information, which—if you have a stock assessment that was done 2 years ago, that's what you use, unless there is new information to update it.

Mr. KEATING. So would you support a change in the law that gave you more flexibility? Instead of being the most conservative in the way you view that data, since there's such a lag time, and it may not be accurate in the first place, would you support something—a language change that would say something akin to, you know, a mean test or something in the middle?

Dr. LUBCHENCO. Congressman, the law is designed—

Mr. KEATING. Would you support that? No, I'm not asking—would you tell me—

Dr. LUBCHENCO. No.

Mr. KEATING. You wouldn't support that.

Dr. LUBCHENCO. No.

Mr. KEATING. OK.

Dr. LUBCHENCO. The law—

Mr. KEATING. That's almost like I got a yes.

Mr. FRANK. Congratulations.

Mr. KEATING. Thank you. I am pretty good for—[Applause.]

Mr. KEATING. I'm learning fast. Now, the second question I have—we're getting information in the absence of that delay in getting scientific information—I should probably quit while I was ahead. What do you think, Senator? Yes?

But the issue is in terms of collaboration, you know, we're getting information—if you're, again, limited in your scientific—wouldn't it be valuable to get some of the information from the fishermen themselves about what they see as trends? I'll give you an example. I don't know how accurate it is myself, but I heard it from fishermen. They're saying that, you know, with the dog fish, that they're becoming so plentiful, and everything's so slow in dealing with it, and they're predators, and they're hurting other species.

Now, if you were collaborating closely, whether it's a task force—which is something I think would be valuable, where they're included more in the decisionmaking and don't have to go through us to communicate—wouldn't it be beneficial to collaborate more greatly with them? Are there ways to do that that could also reduce the capital cost, if you're using their boats, you know, for certain things and—to work in that respect with that?

Is there a way to alleviate the capital burden and collaborate at the same time, using some of their resources, and also trying to gage the changes of the scientific data with what you're hearing from them? If they're telling you that this is what they're finding out, that this trend is there, since you want to help that lag time, wouldn't their input be—is there a mechanism—maybe the task force that has been addressed is that mechanism—to get their voice in there, what they're actually seeing firsthand, so that you can key in on that first and maybe react to it quicker and get scientific information quicker?

Dr. LUBCHENCO. I'm completely supportive of cooperative research programs that allow us to get information jointly with fishermen. When the council develops the management plans, they utilize all the information that's available in doing so. So there is a process for utilizing information and having it feed into those decisions.

Mr. KEATING. Well, there's obviously a process. That's not—could the process be better by listening to them and having a mechanism where you're hearing, "This is where—this is what we're seeing," and certain trends, and having a process, a different process, evidently, that allows you to have them have the input so you're checking the effects of these things more quickly, sort of prioritizing what they're seeing?

Dr. LUBCHENCO. So I think Mr. Schwaab has a comment here.

Mr. SCHWAAB. Yes, thank you. So one of the advantages, Mr. Keating, of the sector based management is much better and more timely information on what is being caught, both in directed catch and in bycatch. And those—that does present a very significant advantage in responding more quickly to what we're seeing on the water on the dependent side.

On the fishery—on the survey side, we also do use fishermen as platforms in a number of cases to help with the gathering of what we call fishery independent data. Now, in those cases, the fishermen aren't fishing. They're conducting surveys. But we did, as a result of the management review that we conducted, accelerate a review of our five-year cooperative research plan, and we have had a series of meetings all up and down the coast to develop a refined cooperative research plan to get information from fishermen and from others, partner institutions and the like, to better deploy our limited cooperative research dollars more effectively.

Mr. KEATING. I harken back to having the process change more to a task force where that's formalized, because I'm hearing that you're listening or you're having that information, but it would be interesting to have that in a more formalized way so that the people that are giving that information can better gage a response, if they have to come back to us.

But, frankly, I already feel like a referee in this, much more than a lawmaker, and we just have to do better in that. And if there are changes legislatively, if you can give us ideas where you think we can get revenues, that's helpful so that we're speeding up the process. But, clearly, I think one of the things worth looking at is maybe changing that statute so that you're not always forced to take the most conservative approach at a time when you don't know if that's a fact. No one knows with certainty.

But these small businesses are dealing with certainty, and that certainty is the bottom line. And we can't afford to have them go out of business because we're not doing our job or you're not doing yours.

So, Senator, I yield back whatever time I have.

Senator KERRY. Well, actually, you've gone double time, and you have no time to yield back. But that's all right. The thought is really appreciated.

Mr. KEATING. Well, I wish that there were other bureaucracies that could give the same flexibility that you gave me, Senator.

Senator KERRY. I'm delighted, honestly. I think the discussion is important, and everybody's had extra time, and I think that's been important. But the result is we are running a little bit behind.

There is one last question I just wanted to ask you very quickly, if I can, before we—we're going to leave the record open so that all the members can submit any questions they want. There are two things I want to ask you very quickly. One, can I get a commitment from you today that both of you would come up here as soon as we could make the arrangement—I'd like to have a private, closed-door meeting with some of the fishermen and key stakeholders and us, and just have a discussion about this.

I think it would be, obviously, a different kind of thing from the hearing, but I think a very important point of communication. Could we make that happen?

Dr. LUBCHENCO. I'm sure—I'm happy to do that.

Mr. SCHWAAB. Yes, sir.

Senator KERRY. Mr. Schwaab? All right. I think if we can arrange that in short order, I think that could be even more profitable, and we can advance even further here.

In defense of some of the answers you've given—and I'm not here to do either, you know, promote one side or the other, except that I want the truth and the fishermen want a better relationship. There are things statutorily and there are objectives stated by Congress that do have to also be looked at here. And there are constraints. There are constraints on the privacy. There are constraints on other things, and there is law in effect. And maybe some of it now has to be changed in order to try to adjust to some of this.

The final thing is, I've asked a number of times whether or not we could take particular sectors of the fishing industry up here which didn't use their quota under Amendment 16 last year and roll over up to 10 percent of that quota into their current catch allowance. And I think if we could do that, that would be an important step forward. Is that doable, Dr. Lubchenco?

Dr. LUBCHENCO. Mr. Chairman, I share the desire to roll over as much quota as possible. Currently, we can roll over up to 10 percent. The council—

Senator KERRY. So the answer is we can. Yes, we could roll over—Brian J. Rothschild, Montgomery Charter Professor of Marine Science and Technology and Co-Chair, Massachusetts Marine Fisheries Institute, University of Massachusetts Dartmouth

Mr. FRANK. Senator, would you yield?

It's 10 percent now, so you're saying you would agree to more than 10 percent, changing that regulation so more than 10 percent could be rolled over?

Dr. LUBCHENCO. I would like to see more than 10 percent be rolled over. The decision is the Council's, and we have repeatedly asked the council to move this up on their list of things, because—

Mr. FRANK. If they can set it up, it's very appreciated. So that if the Council were to do it, they would encounter no resistance from you. You would—

Dr. LUBCHENCO. Absolutely.

Mr. FRANK.—approve what the council did.

Dr. LUBCHENCO. Absolutely.

Mr. FRANK. Well, that's a target for—

Dr. LUBCHENCO. What needs to be done—they need to do an analysis to make sure that rolling over—if you roll over too much, then you actually might cause problems down the road.

Senator KERRY. Sure. We understand. You go backward down the road. We understand.

Dr. LUBCHENCO. And nobody wants that to happen. So they need to do their analyses. We want them to do it sooner.

Mr. FRANK. I appreciate it, Senator, for yielding, but for once let's try to look at something that might be good without caveating it to death before we do it.

Senator KERRY. Thank you. I think that's a positive note. I think that that's encouraging, and it's good that we can do that rollover,

and I think we need to try to get that effected as rapidly as we can together with the emergency declaration.

So on that note, Dr. Lubchenco, let's look forward to this next meeting which I will try to convene as rapidly as we can get it together. And if there are particular interested parties here that want to make sure they are part of that, you should see John Phillips right here at the—John, raise your hand—or—Senator Begich, do you have a staff person here?

Senator BEGICH. Jeff or Bob.

Senator KERRY. Just the folks back there, and we'll make certain that we pursue that.

So, Dr. Lubchenco, thank you. I think—I don't know if you can stay and listen. I think it might be helpful if you can.

Dr. LUBCHENCO. I have another appointment. I will stay as long as I can.

Senator KERRY. Great.

Dr. LUBCHENCO. But I need to get to that appointment.

Senator KERRY. We really appreciate it.

Dr. LUBCHENCO. But I think I've got some time to stay, and I'm anxious to hear what others have to say.

Senator KERRY. Good.

So on that note, I call the second panel: Paul Diodati, the Director of the Massachusetts Division of Marine Fisheries; Rip Cunningham, the Chairman of the New England Fisheries Management Council; Dr. Steven Cadrin, who is an Associate Professor, Department of Fisheries, Oceanography School for Marine Science and Technology at UMass Dartmouth; Stephen Welch, Fisherman and Board Member of the Northeast Seafood Coalition; and Dr. Brian Rothschild, Montgomery Charter Professor within the Department of Fisheries, Oceanography at UMass Dartmouth.

I hope this panel will help show the effects on our industry. I ask that each of the witnesses—I'm going to ask you each to just summarize in 3 minutes. Can you do that? I'm confident you can. You can give a pretty solid 3-minute summary of the predicament, what you see happening, and your full testimony will be placed in the record as if read in full. But I think it would be better, frankly, to get to the questions, and we'll get more out that way.

So on that note, do you want to begin, Steve?

Mr. WELCH. Yes, that's fine.

STATEMENT OF STEPHEN P. WELCH, FISHERMAN AND BOARD MEMBER, NORTHEAST SEAFOOD COALITION

Mr. WELCH. My name is Steve Welch, commercial fisherman from Scituate, Mass. I've been fishing commercially full time for 33 years, since a kid, probably about 46 years. I'm a member of Sector 10 on the South Shore of Massachusetts. Sector 10 is fishermen from—basically from Boston south to the Cape Cod Canal. We have one member in Chatham and one member in Provincetown.

I really appreciate you allowing me to speak today. My wife does also. We've been married 18 years and I finally bought a suit, so—and the kids had me wake them up this morning to watch.

We were once a profitable small business entity in the South Shore—all the members of Sector 10. I myself was very profitable in 2008, 2009. Catch shares came in. For the first 3 months, I real-

ized that the way I was operating my business, I was losing money on catch shares.

The ironic part about catch shares—this is a program that was supposed to promote economic efficiency, make us more profitable, and increase flexibility. It hasn't done any of those things. Catch shares from the beginning—when it was stated that we were going to go under catch shares, a significant fraction of the fleet is going to go out of business. In my view, catch shares is doing exactly what it's intended to do—is to put us out of business.

We are fishing under a quota umbrella and disguising it under catch shares. Now, if we went to a straight quota system or a lap or something like that, there's checks and balances in the Magnuson Act that have to be followed—social and economic impacts, fair and equitable treatment. We are not getting this under catch shares. That's the biggest problem I see right now.

And the big problem with the South Shore, to begin with—and I'd like to say one thing. We've been rebuilding the fish stocks the last 15 years. They didn't start rebuilding in 2010. They've been rebuilding. But the sacrifices that we've made for the last 15 years with rolling closures, Days at Sea, large mesh—and I was a part of the management council while—a groundfish advisor, and I supported all these actions because I knew it was going to help, and it did help. That's why we have the stocks we're seeing today.

We succeeded in achieving our objectives. The problem with the South Shore is that we were closed out of the fishery for up to six months a year, and during that time, we all found other jobs. When we were allowed to go fishing, we had three summer months when the dog fish were around and we couldn't even access our traditional groundfish stocks, and the other months were in the winter. So we got out very little. So we had small quotas.

The guys in the South Shore—we worked together to keep us. We've learned how to fish sustainably and responsibly. You worked in a boat, you ran a boat, you bought a boat. We know all about sustainability and responsibility. I don't need anyone telling me how to do this, because it's in my own best interest and everyone's interest that fishes realizes that.

You know, the bad side about going to this catch share system is the allocation from 1996 to 2006—we had very little allocation. Now that the stocks were built, we can't access them, and we are going to go out of business. It's cheaper for me to stay at home and lay off six employees between two boats than to actually go fishing under catch shares. And that's what I did last year, and I felt like I was—I'm not doing my responsibility as an American citizen to sit at home and lease out my quota. It's an injustice to the American people.

The big—another problem with catch shares—

Senator KERRY. I need to ask you—does that wrap—

Mr. WELCH. OK. Just the cost of sectors, to join them, to develop them, to operate them—the sector management staff—vast amounts of people—we're leasing. It's costing me right now 45 percent of my gross revenues—45 percent is going to leasing.

When we talk about revenues, let's not talk about gross revenues. Let's talk about net revenues. That's where the problem is. Nobody's netting. We're losing. We're going out of business. And if

we have to pay for monitoring next year out of our own pockets, then I'm quitting fishing, and I will stay home and become a welfare armchair captain.

Thank you.

[Applause.]

[The prepared statement of Mr. Welch follows:]

PREPARED STATEMENT OF STEPHEN P. WELCH, FISHERMAN AND BOARD MEMBER,
NORTHEAST SEAFOOD COALITION

Mr. Chairman, members of the Committee, I am Stephen Welch. I own and operate the fishing vessel *Holly* and *Abby*, which is a 55 foot gillnet vessel, and *Abby* and *Holly*, a 45 foot trawl vessel, both of which operating out of Scituate, MA. I have been active in the NE groundfish fishery for over 35 years as a boat owner, captain and crew on inshore and offshore vessels using all of the major gear types including long-line, trawl and gillnet in Southern New England, Georges Bank and the Gulf of Maine.

I am a member of Northeast Sector 10 established under groundfish Amendment 16 and I am also a Board Member of the Northeast Seafood Coalition. However, I want to be clear that my testimony today is on behalf of myself and no other organization. There are many different views within our industry today and so I am very grateful for the opportunity to present my own. Thank you.

Despite my many years of experience and fishing success, today my fishing business is no longer viable under the new sector management system created under Amendment 16 to the groundfish plan. I am certainly not alone. Prior to Amendment 16, I had a very profitable and successful small business that employed six people full-time. Not anymore. Many other life-long fishermen in Sector 10 and other sectors share my plight.

Three fundamental elements of Amendment 16 changed the world and contributed to the reality I face today.

First and foremost, Amendment 16 changed the basic currency with which investments in the fishery were previously made. Prior to Amendment 16, investments in the fishery were based principally on the value of the permit as measured by its allocated Days at Sea. More days, more value—regardless of any catch history.

Upon implementation, Amendment 16 immediately and completely changed that currency to the “catch history” of a permit and made instant winners and losers within the fishery. Although there were options available to the Council to mitigate the adverse impacts of this change by using a blended currency that accounted for both allocated Days At Sea and catch history, the Council chose to make the most drastic change possible. Was this arbitrary—or based on some form of insider information? I suppose we'll never know. But one thing is clear—some folks made out extremely well—and some of us didn't.

For many like me, this had the dual consequences of stranding considerable investment in Days at Sea and substantially reducing the value and utility of permits under the new sector system. The Potential Sector Contributions (PSCs) allocated to my permits based on my stock-by-stock catch history under the new sector system are simply far below what is needed to support a viable fishing operation under current economic conditions. That's because when I bought my permits, I wasn't buying them for catch history. This was arbitrary and unfair. The Amendment 16 sector system has virtually destroyed my fishing business at no fault of my own.

The second aspect of Amendment 16 that has contributed to the demise of so many small vessel operators along the Gulf of Maine relates to the various closures designed to reduce mortality of sensitive stocks including especially Gulf of Maine cod. This dramatically and disproportionately reduced our access to certain traditional stocks and, by extension, reduced our catch history relative to those that were less directly affected by the closures—and/or who found ways to continue to target cod and other stocks and increase their catch history notwithstanding the overfished condition of those stocks. In effect, this was double jeopardy. First we were disadvantaged under the old Days at Sea program for lack of access to our nearby traditional stocks—and then this was perpetuated and exacerbated when our lack of catch history of those same stocks became the new allocation currency under Amendment 16. We were denied access to our nearby stocks—and then punished for not having that access.

Because the Amendment 16 sector system is a catch share, hard TAC “output control” management system, there should be no place for continuing any of the “input controls” such as groundfish mortality closures in this new system. Yet, they exist

in the plan today as a useless, counterproductive artifact of the old Days at Sea management system. And they are still hurting us. This needs to be fixed.

The third aspect of Amendment 16 that threatens small operations like mine are the costs associated with the new sector system. Sectors themselves cost money to develop and operate—a lot of money we have found out. Sectors need a manager and staff to satisfy the vast amount of paperwork and reporting requirements thrust on them by Amendment 16. This is no small thing.

In addition, the sector system has transferred traditional NMFS functions including especially catch monitoring—onto the private sector. Although mandatory requirements for dockside monitoring have recently been eliminated, we face the requirement to pay for At-Sea monitoring costs beginning in fishing year 2012.

Another substantial constraint is the costs associated with leasing fish, to make up for the poor allocations and low ACLs. For me, this cost equates to up to 50 percent of my gross revenues. Small businessmen like me simply do not have access to the capital it takes to participate in the leasing market.

Together, these staff, reporting and monitoring costs, and leasing costs represent completely new, unprecedented burdens that our fishermen have never faced—and I can assure you that neither the status of the stocks nor the financial condition within the fishery are at a level that can support these new costs. Not even close. The addition of At-Sea observer fees in 2012 would be absurd. If nothing is done, many other fishermen will be financially crippled by these new costs. In fact, I would venture that the entire sector system will collapse under the weight of these new costs in Fishing Year 2012.

What can be done? It's not too late for some of us hanging on to our permits in hopes that Congress, NMFS and the Council can make some serious changes and improvements to turn things around. At the same time, some things may not be possible at this point. Here are my views on what can and cannot be done at this point:

(1) Allocation:

While the sector system and some of its key elements are greatly detested by me and many of my fellow industry members, the system is here to stay for the foreseeable future. It could have been done right; but it wasn't. Magnuson mandates are real and now there are no real alternatives available to the existing sector system. Therefore, it is critical to make the existing sector system work and not pose unrealistic alternatives that have the potential to strand more capital and put more people out of business. Initiating programs that assist fishermen with the capital needed to be active in the fishery are essential for the fleet, especially for those that have been adversely impacted by a hasty allocation formula adopted by the Council through Amendment 16.

(2) Access:

With the strong encouragement of Congress, both the Council and NMFS need to maximize fishery access by eliminating all groundfish closures that are not critical for habitat protection purposes. Increasing access to stocks in proximity to small vessel fleets such as ours in Sector 10 will enhance our cost efficiencies given high fuel and other costs and move us toward financial viability.

In addition, leasing additional quota of stocks in close proximity will make a lot more business sense if that quota can be more easily accessed in a cost efficient manner. For those vessels that received very small catch-history based allocations under Amendment 16, leasing is one of the few options they have for improving their financial viability—but again, only if that quota can be accessed in a more cost efficient manner. Currently, the costs of leased quota coupled with the cost of accessing that quota are prohibitive. Re-opening archaic near-shore groundfish mortality closures is a critical step to addressing this problem.

Finally to this point, please do not allow the Stellwagen Bank Sanctuary staff to take yet another needless bite out of our most important small-vessel fishing grounds. There are better ways to achieve what they want by tapping into existing habitat closures. They need to listen to the ideas of fishermen who have spent generations on this Bank. Let's not forget Stellwagen was established for the purpose of providing a sanctuary for our centuries-old fishery.

(3) At Sea Monitoring Costs:

As described above, many groundfish stocks will have to rebuild far more, our ability to more fully utilize those stocks will have to increase substantially, and the overall financial stability of the sectors will need to improve dramatically before we can assume the costs of At-Sea Monitoring. This is NOT going to happen in fishing year 2012.

Notwithstanding the current requirement in Amendment 16 for the industry to assume these costs next year, Congress and the agency need to accept this reality and ensure that these costs are fully funded in FY12 and probably FY13. We certainly recognize the difficult budget climate you face in Washington these days, but the consequence of not funding A-Sea monitoring next year will be a collapse of the sector system and a whole lot of New England fishermen contributing to the unemployment rate.

Based on findings from a report prepared by Marcus Hartley of Northern Economics titled "A Review of Observer and Monitoring Programs in the Northeast, West Coast and Alaska," presented to the New England Fishery Management Council on September 28, 2011, in 2010, the At Sea monitoring program for all sectors cost \$4.3 million, which equates to an average of 5.3 percent of the ex-vessel revenue. However, in my vessel class, the average amount was higher; 9.9 percent of the revenue—and my business costs are even higher, 35 percent for one-day trip. On top of all the other new costs associated with sectors, this is simply unsustainable. My business can not afford this, nor can any other business in the fishery. And, at a total cost of \$4.3 million, the At Sea monitoring cost equates to \$2.20 per pound of discards—which is completely absurd in terms of cost/benefit.

To this point, we are extremely grateful to Mr. Kerry and other Senators for securing language in the Senate's bill to fund NMFS in FY12 that makes it clear that NMFS must fully fund At-Sea monitoring of the groundfish fleet in fishing year 2012. We can only hope and urge you to do everything you can to ensure that this language will survive the difficult battles that lie ahead in the FY12 appropriations process—and that this monitoring is indeed fully funded next year.

(4) ACLs:

Thanks to you Mr. Kerry, and our other good friends in Congress and the State of Massachusetts, an enormous effort was made to get NMFS to adjust the initial ACLs for stocks managed under Amendment 16. Even small upward adjustments to these ACLs that would not have exceeded the overfishing limits could have made a huge difference in several ways—

- reduce inflated leasing costs that prevent our small vessel fleet from leasing our way out of the insufficient initial allocations they received under Amendment 16;
- thaw the "frozen" sector trading system that is essential for sector viability and greater OY utilization; and
- increase the viability of individual fishermen with very small PSC allocations.

It seems there were two things that got in the way of the agency using common sense. First were the National Standard 1 guidelines that have excess levels of precaution built into multi-layers of buffers which results in ACLs being set far below the Fmsy—the true overfishing limit. Congress should look into what changes can be made to these guidelines—either through statutory changes or otherwise—to achieve a greater utilization of OY. We all know that science and management have inherent uncertainties and risks, but these guidelines simply went too far in trying to address those concerns.

Second, it seems the agency was stymied by a pointlessly narrow interpretation of its own guidelines for using its emergency action authorities under the Magnuson-Stevens Act. Congress should very seriously consider re-writing the emergency action provisions in the statute to provide the agency with a more useful level of flexibility when common sense dictates. There should be a fail-safe mechanism built into the process when the results of Council and/or Scientific and Statistical Committee actions simply don't make sense and undermine the overarching purposes of the Act. That is what we thought the emergency actions provisions in the Act were meant to do—but clearly they didn't work in the case of the groundfish ACLs.

(5) Rebuilding:

The bottom line is that we continue to under-harvest the groundfish stocks at an alarming rate. The sector system has not changed that and, in fact, the sector system will not achieve its objectives unless we can fix this. More utilization of the OY means more fish in the system—which will mitigate most of the problems discussed at the hearing today.

The current MSA provisions dictating arbitrary time-frames for achieving a fully-rebuilt biomass has no basis in science and has seriously undermined efficient fishery management and caused immeasurable and needless financial harm to U.S. fishermen. That is because we are leaving vast quantities of sustainable yield in the ocean in order to rebuild a stock—not according to nature—but according to an arbitrary deadline set in a statute.

The truth is, the only thing we can control is fishing mortality. But that is only one component of what determines if, how and when a stock achieves rebuilding. No one can control the other 3 core components of recruitment, growth and natural mortality—not Congress, not scientists and not fishermen. And, as we see year after year in groundfish stock assessments—not only are we completely unable to control those aspects of population dynamics, we cannot predict them with sufficient accuracy either.

The rebuilding provisions of the Magnuson-Stevens Act need to be reevaluated and revisited if we are ever going to be able to solve this problem. But, even the most thoughtful efforts to do this have been treated as if they are radioactive. We need some real leadership in this arena. We are wasting our fish and losing our fisheries. It's pointless.

We understand that at the request of Congress, the National Research Council may begin looking into this. We strongly encourage this and hope that the right people will be appointed to do this work, and that it will be a serious effort to find improvements. We sincerely hope this will provide the basis for Congress to take the difficult political steps needed to improve the statute.

(6) Financial Assistance:

As mentioned above, through sectors our fishery has to absorb unprecedented costs to establish and operate sectors. While stocks have yet to rebuild and the sector system in its infancy, it is extremely difficult if not impossible for sectors to generate sufficient funds to meet these initial start-up and operations costs. We have received some financial support from the agency to date and frankly we could not have made it this far without it. But we are far from solvency—at least for my Sector 10. Additional direct financial support for sector start-up and operational costs is desperately needed.

Access to capital that is not readily available to the fleet is also critical. While many of us have managed to hold onto our permits this year, we literally cannot afford to fish. We cannot afford the inflated quota leasing costs or the cost of new permits with higher catch histories. We are stuck in limbo—desperately wanting to fish and generate revenue, but unable to buy our way out of port. While we hope and wait for Congress or the Council to make changes that will improve our circumstances, some form of financial assistance to those most disadvantaged by the change in allocation currency from Days at Sea to “catch history” will be needed to bridge that gap. We ask you to seriously consider what Congress can do to help with this.

Thank you for the opportunity to present my views. I would be pleased to answer any questions.

Senator KERRY. Mr. Diodati?

**STATEMENT OF PAUL DIODATI, DIRECTOR, MASSACHUSETTS
DIVISION OF MARINE FISHERIES AND CO-CHAIR,
MASSACHUSETTS MARINE FISHERIES INSTITUTE**

Mr. DIODATI. Thank you, Senator. And I want to thank all of you Senators and Congressmen for having me here this morning. And I'm going to jump right to it, because 3 minutes is a very short time.

I'm going to talk about a preliminary analysis that the Division of Marine Fisheries has conducted on Sector 10, which is the sector that Captain Welsh fishes out of. It's a day boat sector, operating out of the Plymouth-Scituate area. And for our gentlemen from Alaska, that's a mid-coast area for us. It's not only made up of small boats, but it could have been disproportionately impacted by this new program.

Amendment 16 did allocate hard catch limits to comply with the MSA, to not only comply with MSA mandates but to achieve economic efficiency. Our conclusions from the case study suggest that there's been significant consolidation of revenues among fewer vessels. You've already heard that this morning. And it's caused severe economic strain among the majority of fishermen, most of whom are small vessels.

Sector 10 began the 2010 year with 20 percent lower quota allocation, compared to its 2009 landings. They traded and leased quota but could not mitigate this difference. By the end of the year, their landings fell 60 percent below the previous year's level. Sector 10's reduction in landings contributed to a 53 percent reduction in its groundfish revenue and a 23 percent reduction in its overall revenue.

Reduced overall revenue occurred despite a significant shift into other non-groundfish fisheries—Steve mentioned dog fish, for instance—and higher prices paid for fish in 2010, the highest prices we've ever seen. A major point was large amounts of very valuable fish were left uncaught at the end of the year. And, Senator Kerry, you pointed out the matter of rolling over quota that's relevant to that. Other Massachusetts sectors also ended the year with uncaught quota. None, however, exceeded the amount left uncaught by Sector 10—nearly 50 percent.

We also did an analysis to determine that sector's breakeven points, where revenues equal total costs. And it shows an increase in number of permits not breaking even in 2010. Nearly 50 percent of all active permits fell below the breakeven point. We haven't completed this for the fleet overall outside of Sector 10, but we expect similar results to show.

So what's interesting is not only in 2010, but years prior to that, 2009 for instance, there were significant numbers of vessels not breaking even, suggesting that they're leaving their permits to be leased out. They're drawing on personal income, extending credit, shifting fishing costs to the crew, shrinking their crew size or postponing vessel maintenance. None of those are good deals for the fishing industry or the Commonwealth.

A recent performance report that you spent a lot of time talking to Dr. Lubchenco about this morning was released by the National Marine Fisheries Service six months after the end of the season. It did show that one-third fewer boats have been operating in the fishery since 2007 every year. That report also increases—or illustrates an increase in the concentration of groundfish revenues among the top earning vessels, those over 75 feet.

So these major shifts in distribution of quota or income into fewer fishing permits was noted five months into the fishing year by the Commonwealth's report that Governor Patrick forwarded to Secretary Locke back in November of 2010. So there's nothing new there.

I'd like to offer a few solutions that might be helpful to mitigate some of the problems we're seeing. There's certainly need for liquidity and certainty in the lease marketplace for quota. A central database that tracks trading and provides real-time accounting of landings and quota balances would ultimately improve business

planning for fishermen, and it would help fishermen build and better manage their quota portfolios.

And while there are economic efficiencies that we're seeing, these benefits are not widespread throughout the industry and generally not enough to counter the high cost of monitoring. So we strongly recommend that NMFS continues to pay for monitoring of the fishery and administration of sectors beyond the year that they plan on stopping.

A redistribution and concentration of revenue and less capital leaves smaller scale vessels disproportionately impacted. So we recommend government-funded loan programs to assist small business operators, in particular, with equity and opportunity to lease more quota.

So I'll stop there, Senator, and answer—

[The prepared statement of Mr. Diodati follows:]

PREPARED STATEMENT OF PAUL DIODATI, DIRECTOR, MASSACHUSETTS DIVISION OF MARINE FISHERIES AND CO-CHAIR, MASSACHUSETTS MARINE FISHERIES INSTITUTE

Good morning Chairman and other members of the Committee. My name is Paul Diodati, and I want to thank you all very much for the opportunity to share a few thoughts about how catch share management, in general, and sectors, in particular, have affected the health of the Massachusetts groundfish fishery.

I am the Director of the Massachusetts Division of Marine Fisheries, and Co-Chair of the Massachusetts Marine Fisheries Institute. I am the Commonwealth's Administrative Member to the New England Fisheries Management Council and the Atlantic States Marine Fisheries Commission. For over thirty years I have trained and worked in fisheries science and management at the regional and national level.

With the majority of sectors operating out of Massachusetts ports, the Commonwealth has a strong interest in promoting the effective transition to catch shares in New England, while minimizing any potential adverse social-economic impacts to fishing communities and businesses that are sometimes attributed to catch share programs. We understand the difficulty our industry is having adapting to the cultural change that accompanies sector management. At the same time, we can't forget the severe hardships endured by our fishermen under the former Days-at-Sea Program (DAS) that returned too little in conservation benefit. The Patrick-Murray Administration has voiced strong concerns with the sector program's implementation and urges applying the highest annual catch levels when alternatives are permissible and use of cooperative research to improve stock assessment.

The Division of Marine Fisheries conducted a case study of Northeast Fishery Sector 10 (a day-boat sector operating out of the Plymouth-Scituate area) in order to identify major impacts posed by Amendment 16 (catch shares). I wish to thank the Sector 10 members and manager for their willingness to share confidential information with the Division to better enlighten us all about what is occurring within sectors. Amendment 16 initiated this catch share program with hard catch limits (quotas) in place of days-at-sea restrictions to meet the 2006 MSA mandate to implement Annual Catch Limits (ACLs) and Accountability Measures (AMs), and to achieve economic efficiency. It is our conclusion from this case study that although vessel and permit consolidation have created some economic efficiencies it has not resulted in greater profitability.

Our review does not consider the merits of an input vs. output control program to manage fisheries or if quota allocation was done in a rational way. Comparing fisheries performance between 2009 and 2010 requires much more economic analysis and social research to accurately explain changes occurring in our fishing fleet, fishing communities, and seafood markets and to correctly identify the responsible causative factors.

To put this daunting task in context consider some of the variables in play in 2010:

- Annual Catch Levels (ACLs) were reduced 30 percent from 2009;
- Total Allowable Catches (TACs) were enforced;
- assumed dead discards were newly applied to reduce ACLs;
- nominal daily trip limits were abandoned;

- closed areas were reopened;
- management and monitoring costs were shared by industry;
- stock areas were off limits to fishermen unless their sector had sufficient amount of quota for that stock area;
- and an unrestricted market for sector Annual Catch Entitlement (ACE) leasing was put in place with no central system to track the exchange of quota between sectors available to fisheries managers.

The National Marine Fisheries Service is working to generate more information about fishery performance and the Division will continue cooperative efforts to assist in these analyses. The Sector 10 case study on which I will focus only considers Amendment 16's economic outcome. >>

Sector 10 began the fishing year with a 20 percent lower landing allocation compared to 2009 landings; reductions for some individual fishermen were even higher. Actual 2010 landings fell even lower—60 percent below the previous year's level. Trading and leasing could not mitigate the general insecurity with new sector business practices. For example, there were unknowns about how discard mortality would affect an individual's share of quota, or Percent Sector Contribution (PSC); and concerns about lack of certain species in one's quota portfolio.

Sector 10's reduction in groundfish landings contributed to a 53 percent reduction (\$1.5 million) in its groundfish revenue and 23 percent reduction (\$1.0 million) in its overall revenue. Reduced overall revenue occurred despite a significant shift into other non-groundfish fisheries (such as dogfish, lobster, and squid) by some of its members and higher average prices paid for all fish than in prior years. A major point being, large amounts of valuable fish, including fish that were leased in by Sector 10, were left uncaught. Discussions with non-sector 10 fishermen suggest other Massachusetts sectors also ended the 2010 fishing year with uncaught ACE; but we cannot identify another sector that exceeded Sector 10 in the amount of relative uncaught ACE (50 percent).

We conducted an analysis to determine break-even points, where total revenues equal total costs, which shows an increase in the number of permits that did not break-even. In 2010 nearly 50 percent of active permits fell below the break-even point. We haven't been able to complete a direct comparison of this with the entire fleet in time for this hearing, although we expect fleet-wide analysis is likely to show similar results. We also found a significant number of fishing businesses were operating below break-even points in years prior to 2010. Many fishermen are trying to survive by drawing on personal income or extended credit, shifting more fishing costs to crew or shrinking crew size, or postponing vessel maintenance.

A recent performance report of the 2010 groundfish fishery issued by NOAA Fisheries' Northeast Fisheries Science Center demonstrates that fewer boats, about one-third fewer each year since 2007, have been operating in the groundfish fishery. The Federal report also illustrates an increasing concentration of groundfish revenues among the top earning vessels, vessels greater than 75 feet. Only 20 percent of vessels accounted for about 80 percent of gross groundfish revenues. This sign of consolidation is confirmed by an earlier report prepared by the Massachusetts Marine Fisheries Institute (MFI), which Governor Patrick forwarded to Secretary Locke in November 2010. The MFI reported major shifts in the distribution of quota (income) as noted by as much as two-thirds of fishing permits that were allocated 50 to 60 percent less than their 2007–2009 average annual harvest levels.

The transition to catch shares under Amendment 16 has been difficult in terms of the program's allocation determinations and socioeconomic impacts, and many of the challenges cannot be measured in a single fisheries science report. Looking to the future, I'd like to offer possible solutions to mitigate some of the impacts we identified.

Solution 1—There is need for liquidity and certainty in the lease marketplace for ACE and a need for fishermen to have a better understanding of how to succeed under sector management. A central database that tracks all ACE trading activity and provides real-time accounting of ACE balances would assist in exchanging quota between sectors and ultimately improve business planning for individual fishermen. Additionally, I believe it would be of benefit for NOAA to implement training programs for sector fishermen to assist in building and managing their quota portfolios.

Solution 2—While sector management created economic efficiencies for some members of the fishery, these opportunities were not widespread and generally not enough to counter high costs of monitoring and operating fishing businesses. NOAA should work to reduce at-sea monitoring costs while continuing to fund sector monitoring and administration. We believe such assistance will help push the balance

of break-even points toward the black for more fishermen as they adjust to and learn how to prepare and implement annual sector business plans.

Solution 3—Redistribution and concentration of revenue and less access to capital leaves smaller-scale vessels disproportionately impacted by sector management. Government assisted loan programs for quota leasing should be established throughout the Northeast to aid small-scale, owner-operated fishing businesses for those who lack sufficient valuation to obtain loans from conventional finance institutions. Additionally, more work needs to be done to allow a higher percentage of unused quota to reach the marketplace.

Finally, in context of a new management system that presents a steep learning curve for both fishermen and managers, I would ask you to urge the Secretary of Commerce to instruct his staff to discourage adding large uncertainty buffers that may unnecessarily lower annual catch levels and to define overfishing limits from direct estimates of F_{MSY} and B_{MSY} when they are available and defensible. Maintaining ACLs at the highest level during the next few years will contribute toward economic viability of more segments of the fishery, particularly the small-boat segment. Increased amounts of ACL will become more valuable as fishermen adjust to new sector business practices and begin to make full use of their annual quota.

The Commonwealth is committed to working cooperatively with the Federal agencies, fishermen, our Congressional delegation, and local officials to meet these challenges. I hope my testimony will assist the Committee formulate remedies to improve the operation of our groundfish fishery. I'd be glad to answer any questions.

Senator KERRY. We'll get onto it—we'll get into it in the questioning.

Mr. DIODATI. OK.

Senator KERRY. A lot of this will come out. So don't feel you're being shortchanged because there's time yet.

Mr. Cunningham?

**STATEMENT OF COLIN McALLISTER "RIP" CUNNINGHAM, JR.,
ACTING CHAIRMAN, NORTHEAST FISHERIES MANAGEMENT
COUNCIL**

Mr. CUNNINGHAM. Senator, other committee members, and Massachusetts delegation, thank you.

I have three areas of discussion. First is the management review report. The challenges and improvements detailed in the report are currently being implemented by the leadership of NOAA Fisheries, the Northeast Fisheries Science Center, and the Council.

The Council agreed to take a lead on improving communication and collaboration with stakeholders, creating a regional vision and a strategic plan, and designing a cost-effective performance management system. Based on work completed over the summer, the full Council approved a series of actions that will accomplish these initiatives, all of which we expect to be completed in the near future.

First years of sectors—concerning NOAA's recently released sector economic report, the analysis did not include all key data. Additional work will be released later in the fall and will represent a more complete and useful picture. One unstated fact is that fewer days fishing has meant substantial savings in operating costs and benefits from reduced habitat impact. The new system has also allowed a redirection of fishing effort onto robust stocks.

The report highlights consolidation, but it began well before the implementation of sectors. The increases in total revenues for vessels with groundfish permits happened at the same time that Magnuson mandated over 50 percent decreases in allowable catch for some species, showing the value of sectors.

Until May 2010, the much-derided groundfish Days-at-Sea program was in effect, and the program made it very difficult to remain economically viable. There was simply no stability in management regime. In addition to limits on the number of available days to fish, there were a myriad of other rules depending on gear type, areas fished, species harvested. Management was by mandated inefficiencies.

With implementation of sectors, many old rules were eliminated. Fishermen can respond to market conditions, weather concerns, and reduce wasteful discards. With greater flexibility, sectors can avoid any race to fish which results in lower prices to the fishermen.

While sectors have remedied some problems in the fishery, others have emerged. So the Council scheduled a 2-day workshop in late October to hear directly from the 17 sectors about the performance of the system. The Council hopes to include any practicable solutions in follow up actions in 2012.

Senator Kerry, I realize that you, along with Congressmen Frank and Keating, are concerned about the unused rollover. There was discussion about it here earlier. We do have the 10 percent provision in there. But recognizing it's still an issue, we've put it back on the table because we realize it increases flexibility for fishermen.

Our New England delegation has advised the Council of their concerns about the NOAA-funded, state-operated permit banks. The Council agrees that it's essential to ensure that outcomes match their intended purpose to preserve fishing opportunities for small owner-operated fishing businesses in the New England communities. Hopefully, we can get to some of the ACL things, but I see my time is running out.

In summary, given the reductions in catch needed to meet the Magnuson requirements under National Standard 1, sectors emerged as the best viable option to replace the Days-at-Sea management regime that was slowly strangling the New England groundfish industry.

Thank you.

[The prepared statement of Mr. Cunningham follows:]

PREPARED STATEMENT OF COLIN MCALLISTER "RIP" CUNNINGHAM, JR., ACTING
CHAIRMAN, NORTHEAST FISHERIES MANAGEMENT COUNCIL

Good morning Senator Kerry and other members of the New England Congressional delegation. On behalf of the New England Fishery Management Council, I am pleased to respond to your invitation and hope that I can be helpful to you and the other members of the Committee, as well as any members of the fishing community who are present at this hearing.

Before I begin, I would like to offer a few details about my background. I have served on the Council since 2004 and was just recently elected Chairman. I was elected to the Vice Chair position for each of the last 5 years. During this same period I chaired the Council's Northeast Multispecies or Groundfish Committee, which includes the time-frame in which the Council adopted the catch shares program known as sectors. I was the former owner, publisher and editor-in-chief of *Salt Water Sportsman*, the world's largest sport fishing magazine, with approximately four million readers. I am privileged to have made a living by advocating for our region's valuable marine fisheries while also enjoying many years of recreational fishing.

I have stated this before, but it I believe it is worth repeating to this committee. With 18 voting members on the New England Fishery Council, there often are 18

different opinions about the problems we face and their solutions. As a result, my comments may not represent the opinion of any individual member or the official position of the Council, but I will try to convey the sense of the Council as a body in this testimony and in my answers to any questions you might have.

I would like to talk about several broad topics today:

- (1) The report authored by Preston Pate and the Touchstone Consulting Group titled *A Review of the New England Fishery Management Process*;
- (2) My views about the first year of sector management in the New England groundfish fishery with some comments about relatively recent and future Council actions; and
- (3) Issues identified by Members of Congress, including the inability of vessels to harvest the groundfish annual catch limits.

Touchstone Report—Many of the challenges and needed improvements detailed in the report have already been discussed among the leadership of NOAA’s Fisheries Service in Gloucester, the Northeast Fisheries Science Center in Woods Hole and the Fishery Management Council. During our talks, the Council agreed to take the lead on:

- Improving communication and collaboration with stakeholders, including redesigning Council and other meetings to facilitate this outcome;
- Creating a regional vision and strategic plan that will incorporate collaboration with all stakeholders and set a future direction for the fishery, more on that in a moment; and
- Designing a cost-effective performance management system to track the progress of decisions, capture lessons learned and incorporate best practices.

Based on work completed over the summer, the full Council approved a series of actions that will accomplish these initiatives: (1) holding additional, less formal types of meetings to promote a more productive dialogue between the Council and the fishing industry; (2) establishing an ad hoc committee of stakeholders to advise the Council and its staff about the most effective types of outreach; (3) possibly convening listening sessions at which stakeholders will have an opportunity to query Council members about fisheries management issues rather than vice-versa; (4) simplifying and coordinating communications with the National Marine Service; (5) developing a vision and strategic plan with a core structure that evolves from an eco-systems-based approach to fisheries management; and finally (6) developing and implementing a system to track and evaluate the development and effectiveness of the Council’s decisions, as well as document “lessons learned.”

Remarks About the First Year of “Sectors”—I would like to discuss several of the findings in NOAA’s recently released social and economic report, some, but not all of which have been covered by the media. First, we know the analysis that formed the basis of the report did not include all key data. Additional work scheduled to be released later in the fall will likely present a more complete and useful picture.

Second, we also know that fewer days fishing has meant substantial savings in operating costs and benefits from reduced habitat impacts.

Third, many of the changes that occurred between the earlier years analyzed and 2010 reflect trends that have been documented since 2007. I believe it is clear that consolidation began well before the implementation of sectors. Other changes include declines in the number of active vessels and crew and a gradually increasing concentration of revenues among top earning vessels. On the other hand, we also see that the most recent trends include increases in total revenues for vessels with limited access groundfish permits (generally full-time active vessels), as a result of increased prices for both groundfish and non-groundfish species. The new system has allowed a redirection of fishing effort, or fishing pressure, onto robust stocks.

While some of the findings are of concern, I would like to put them in context. You may recall that until May 2010, the much-derided groundfish days-at sea program was in effect for three out of the 4-years evaluated in the report. Limited fishing days resulted in measurable stock rebuilding, but the program made it difficult for many businesses to remain economically viable.

In addition to limits on the number of available days to fish, there were restrictions on the quantities of fish that could be harvested (daily or trip limits), the mesh sizes in fishing nets, the sizes of fish that could be caught, closed areas and a myriad of other rules, depending on gear type as well as the areas and species harvested. Most were mandated inefficiencies.

With implementation of the new program, many of the old rules were eliminated. Under sectors fishermen could better respond to market conditions, weather concerns and reduce wasteful discards. With greater flexibility, sector members could

avoid any “race to fish,” a circumstance that frequently produces a temporary oversupply in the marketplace, resulting in lower prices to fish harvesters. The increased economic performance in terms of higher revenues per unit of effort by sector vessels noted in the economic report may be reflection of some of the benefits of sector management.

Even so, the Council remains concerned about the problems confronted by many New England groundfish fishermen. According to the NOAA economic report, the total groundfish catch, which includes cod, haddock and various flounders, was down to about 58 million pounds last year. Landings had ranged from 64 to 72 million pounds annually between 2007 and 2009.

From my perspective, the situation may have less to do with sectors than is assumed when viewed in the context of the health of our groundfish stocks. More than half of the 20 stocks in the groundfish complex are still overfished and therefore subject to strict rebuilding programs. Stocks are still required to be rebuilt as quickly as possible and within a period not to exceed 10 years, with few exceptions, according to the reauthorized Magnuson-Stevens Act.

While sector management has remedied some problems in the fishery, others have emerged. As a step toward making improvements, the Council has scheduled a two-day workshop in late October to hear directly from the 17 sector managers and their members about the performance of the sector system and recommended changes that would help their businesses. The Council hopes to include any practicable solutions in a follow-up groundfish action in 2012.

We also are aware that paying for monitoring may be out of reach for the average fishermen. Although the Council is not constituted to fund such programs, it has supported a new and hopefully constructive dialogue that will help resolve this very critical problem.

Fears concerning the loss of fleet diversity and fleet consolidation have been expressed by many from within and outside the industry. Heeding those concerns, the Council has agreed to develop measures that will address both accumulation limits and fleet diversity. The Council also may create other incentives to maintain diversity and fishery infrastructure.

I am also aware of additional issues that merit attention. Senator Kerry, I realize that you, along with Congressmen Frank and Keating, are concerned about the unused groundfish quota from fishing year 2010 that otherwise might be rolled over into the next fishing year. Some additional information about the existing measure might be useful.

The Council knows that carry-over provisions are common in other catch-share systems around the country and adopted a measure that limits the New England groundfish fleet to 10 percent of the allocations. This amount is in the mid-range of carry-over percentages that are included in other catch share programs that were reviewed by the Council.

The Council is willing to revisit the issue, but must carefully examine the associated problem of increasing the risk of overfishing. As with any roll-over, the same number of fish may or may not be available in the following year, either because of natural mortality, potential over-harvesting or discarding. These possibilities are of particular concern with respect to the stocks in rebuilding programs. Nonetheless, the Council has already put the issue on the table, recognizing that carry-overs increase flexibility for fishermen and reduce potentially dangerous fishing practices such as a rush to catch all the available fish at the end of the year.

I also realize that our New England Senators have advised the Service and Council of their concerns about the NOAA-funded, state-operated permit banks. The Council agrees that it is essential to ensure that outcomes match their intended purpose—to preserve fishing opportunities for small, owner-operated fishing operations in New England communities that might otherwise be struggling with the transition to the groundfish sector catch-share program.

At its Council meeting in June, concerns were raised that these permit banks could affect the market for groundfish permits. To enhance coordination with these entities, the Council has requested that state-operated permit banks come to the Council for approval prior to using funds other than those provided by NOAA.

Groundfish Annual Catch Limits—The Council has received comments to the effect that groundfish boats have had very limited success in harvesting the annual catch limits (ACLs) of the 20 Council-managed groundfish stocks. The biggest impediment is the potential to exceed the catch limits for some stocks, often referred to as “choke stocks,” before fishermen can catch the ACLs for other stocks.

This is a problem common to all multispecies fisheries throughout the world. In some cases, weaker stocks have low ACLs because they have been overfished and rebuilding is required. Others are simply smaller and less productive than those that have traditionally supported the New England groundfish fleet.

For example, in 2011 the ACL of Georges Bank yellowtail flounder, and to some extent cod, limited the fleet's ability to catch the large ACL of Georges Bank haddock. The uncaught ACL of Georges Bank haddock accounted for 68 percent of the total ACL of all stocks not caught.

Also contributing substantially to the uncaught ACLs were redfish and pollock. To some extent the lack of markets and processing capacity limited the catch of redfish. As another example, the 2010 pollock ACL was about 36 million pounds, or more than twice the five-year average catch from 2005–2009. This very large increase, made available within a relatively short time frame because of a revised stock assessment, made it unlikely that the vessels would catch all of the ACL under any circumstances. Added together, the uncaught pollock, Georges Bank haddock, and redfish accounted for 93 percent of the total uncaught ACLs of all stocks.

Another factor contributing to the large amount of uncaught fish may relate to the start-up aspects of the sector program. Under similar management systems that have been adopted in other fisheries, it has taken several years before the fleets land a high percentage of the available fish. The Council is keenly aware of this situation and will closely monitor progress toward reaching the groundfish ACLs. Current projections indicate that a higher percentage will be caught in this fishing year.

Conclusions—Summarizing some of my earlier comments, given the reductions in catch needed to meet the Magnuson-Stevens Act requirements under National Standard 1, sectors emerged as the best option to replace the days-at-sea management regime that was slowly strangling the New England groundfish industry.

This does not mean that the Council has lost sight of National Standard 8. It seems clear that one of the keys to sustaining fishing communities is to ensure the economic viability of our fishing fleets. Long-term success will not likely be achieved by simply raising fishing levels. New England fishermen have already lived through that expedient, but not very prudent course of action during the 1980s and early 90s.

Based on our experience, sound science and working collaboratively with fishermen, the Council is intent on continuing the important stock rebuilding accomplished to date and maintaining stocks at sustainable levels. We also intend to improve the groundfish sector management program. The Council and many fishermen are working hard right now to adjust to changing resource and economic conditions. The problems we all confront are difficult but not insurmountable.

Senator Kerry and members of the Massachusetts delegation, on behalf of the New England Council, I hope my comments are helpful to you as you continue to engage in discussions about the groundfish fishery. I am available now or in the future to answer any questions.

Senator KERRY. Thank you very much, Mr. Cunningham.
Mr. Cadrin?

**STATEMENT OF STEVEN X. CADRIN, ASSOCIATE PROFESSOR,
DEPARTMENT OF FISHERIES OCEANOGRAPHY, SCHOOL FOR
MARINE SCIENCE AND TECHNOLOGY, UNIVERSITY OF
MASSACHUSETTS DARTMOUTH**

Dr. CADRIN. Thanks for the invitation to testify. I'm Steve Cadrin. I'm a Professor of Fisheries Oceanography at the University of Massachusetts School for Marine Science and Technology. I was asked to address the scientific aspects of fishery science in New England.

In comparison to other systems throughout the world, fishery management in the United States is relatively inclusive, transparent, and science-based. However, the catch limit system and NOAA's catch shares policy are much more demanding than other alternatives. And from my perspective, the current fishery science system in New England is not meeting those increased demands.

New England fisheries management has made great strides over the last decade to end overfishing and rebuild many stocks. However, there are major deficiencies in the quality and frequency of stock assessments and fishery statistics. The fishery management

strategy needs to be reconsidered so that system requirements are more suited to the current scientific capacity.

Specification of annual catch limits requires frequent assessments and projected catch over one to two years. Catch limits based on longer term predictions are based more on assumptions than on data. In addition to the need for frequent stock assessments, accuracy is also required to determine appropriate catch limits.

Many assessments are data-poor and not informative enough to estimate catch limits that avoid overfishing while achieving optimum yield. Other stock assessments are more informative but still have substantial uncertainties that cannot be quantified or used to determine catch limits. A troubling feature of many stock assessments is the lack of consistency from one stock assessment to the next.

Beyond the need for frequent and accurate stock assessments, scientific support for catch limits involves in-season fishery monitoring that's timely enough to support catch share policy. Major components of total catch, such as commercial fishery discards, recreational fishery catch, and location of fishing effort are not well determined, and estimates are not available in a timely fashion.

Many fisheries harvest a mix of species. When stock size is underestimated, catch limits are lower than they should be. And fishermen have difficulty avoiding the species that have artificially low catch limits. Furthermore, when some species are rebuilding, their catch limits remain relatively low while the stock rebuilds, thereby increasing the challenge of avoiding them while targeting healthy stocks.

These problems are then intensified when accountability measures further reduce catch limits on rebuilding or bycatch stocks, thereby increasing the mismatch between the catch limits and the mix of species on the fishing grounds. As a result of the mixed stock problem, the groundfish fishery caught less than 40 percent of the allocated catch in 2010. Landings of haddock, plaice, pollock, and redbfish in 2010 were less than half their catch limits.

Ending overfishing is a great accomplishment. But we need to refine our fishery management plans to progress toward the mandated optimum yields. National Standard guidelines suggest that catch limits should be based on the council's desired risk of overfishing. However, risk management decisions require evaluation of economic costs and benefits that are not routinely provided.

There are several potential solutions to help improve the scientific capacity for supporting annual catch limits. Scientific resources can be increased or reprioritized. The peer review process can be streamlined. NOAA's scientific capacity can be expanded by partnering with other institutions. And the scientific and statistical committee can serve peer review and problem solving roles.

The demands on fishery science can also be reduced in several ways. Exemptions from annual catch limits should be considered when catch cannot be reliably monitored. The mixed-stock exemption should be considered for bycatch and rebuilding stocks. And, more strategically, alternative management procedures should be considered that take advantage of the strengths of fishery science.

In summary, the positive expectations of the catch limit system and NOAA's catch shares policy depend on greater scientific capacity than is currently being provided. Thanks again for the invitation to testify.

[The prepared statement of Dr. Cadrin follows:]

PREPARED STATEMENT OF STEVEN X. CADRIN, ASSOCIATE PROFESSOR, DEPARTMENT OF FISHERIES OCEANOGRAPHY, SCHOOL FOR MARINE SCIENCE AND TECHNOLOGY, UNIVERSITY OF MASSACHUSETTS DARTMOUTH

I thank the members of the Committee for the invitation to testify before you today. My name is Steven Cadrin. I am an Associate Professor of Fisheries Oceanography at the University of Massachusetts Dartmouth, School for Marine Science and Technology. I have over twenty years of experience as a quantitative fisheries scientist with expertise in fish stock assessment and fishery management. I was asked to address scientific aspects of fisheries management in New England.

In comparison to other fisheries management systems throughout the world, the system in the United States is relatively inclusive, transparent and science-based. However, the catch limit system specified by National Standard Guidelines (NOAA 2009) and NOAA's catch shares policy (NOAA 2010) are much more demanding than other alternatives, because they require greater transparency in catch monitoring, more extensive inclusiveness in fishery management decisions and more frequent and accurate scientific products. As detailed below, the current fishery science and management system in New England is not meeting those increased demands.

The New England fisheries management system has made great strides over the last decade to end overfishing and rebuild many stocks. However, there are several major deficiencies in our current fisheries science system that do not adequately support the requirements of catch limit and catch shares management policies. There are major deficiencies in the quality and frequency of stock assessments and fishery statistics, and National Standard Guidelines for implementing the Act pose unrealistic demands on the scientific system. The national strategy for fishery management needs to be reconsidered so that demands on the scientific system are more practically suited to the current scientific capacity and performance of the management system is more robust to the inherent uncertainties in fisheries science.

My view is supported by two recent reviews that were commissioned by the National Marine Fisheries Service. A recent national review on scientific institution building concluded that "*NMFS needs more national scientific leadership, and better management, information systems and organizational structures, to plan and implement national programs,*" and "*this problem has ramifications with respect to the science based roots of the agency and science as the foundation for policy and management*" (Sissenwine and Rothschild 2011). An independent assessment of the fishery management system in New England identified problems and challenges and formed recommendations including "*conduct a comprehensive analysis of all NMFS data systems to identify areas that will improve data gathering, data management, data analysis and data use*" (Touchstone Consulting Group 2011).

New requirements of the 2007 amendment to the Act impose substantially greater demands on the fishery science and management system. The current scientific capacity was more adequate for meeting the requirements of the previous version of the National Standard Guidelines which focused on status determination (*i.e.*, relative stock size, sustainability of harvest) and general management advice. Even state-of-the-art fishery science cannot fully support the risk-based catch limits with accountability measures suggested in the current Guidelines.

Several examples demonstrate that the failure to effectively adapt to new requirements negatively impact fisheries, fishery resources and the Massachusetts communities that depend on them. National Standard Guidelines suggest that catch limits should be based on an estimate of the catch associated with overfishing and uncertainty in the estimate of the overfishing limit, or the catch that will allow rebuilding of overfished stocks; and fisheries should be held accountable for exceeding catch limits. Such implementation of the catch limit mandate requires frequent and accurate stock assessments, comprehensive and real-time fishery monitoring, as well as risk analysis for each fishery. Although the Act establishes National Standard 1 so that "*Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry,*" deficiencies in the scientific basis of fishery management decisions can result in either foregone yield or overfishing, both of which are costly to Massachusetts fisheries and fishing communities.

As implemented in the National Standard Guidelines, specification of annual catch limits requires frequent stock assessments and projected catch over a short period (*e.g.*, one to three years). Stock assessment involves an update of the most recent fishery statistics and resource surveys to evaluate stock status and provide a basis for catch forecasts. Catch limits that are based on recent stock assessments and short-term projections take advantage of the strengths of conventional fishery science, in which catch forecasts are almost entirely based on a synthesis of updated fishery and survey observations. Conversely, catch limits based on longer-term predictions (*e.g.*, greater than 3 years) are based largely on assumed population dynamics rather than on current data. Long-term predictions rely on the ability to predict annual recruitment of young fish and their future vital rates, which are the most challenging problems in fishery science.

New England groundfish, our Nation's oldest commercial fishery resource and one of its most productive, serves as an example of the inadequate frequency and quality of stock assessments provided by NOAA for fishery management decisions. NOAA concluded that it did not have the capacity to provide annual stock assessments for all northeast fisheries (Northeast Fisheries Science Center 2009). As a result of this deficiency in scientific resources, the planned approach for specifying catch limits for the groundfish fishery from 2012 to 2014 was medium-term catch forecasts, five to 7 years from the 2008 stock assessments. The New England Fisheries Management Council's Scientific and Statistical Committee advised the Fishery Management Council that "*Projection of results from GARM III assessments to 2013–2014 were deemed to be too unreliable for setting ABCs*" (Acceptable Biological Catches). The Northeast Regional Coordinating Committee is in the process of revising its assessment and peer review process, and groundfish assessments are planned to be updated this winter. However, the process for updating groundfish assessments is still under development, and the current scientific basis for groundfish catch limits is insufficient.

In addition to the need for frequent stock assessments, accuracy is also required to determine appropriate catch limits. Only a small portion of stock assessments can accurately project catch associated with overfishing and its uncertainty, which is the technical basis of the National Standard Guidelines for deriving annual catch limits. Many assessments are data-poor, and are not informative enough to reliably evaluate stock size, fishing mortality, maximum sustainable yield reference points or catch projections to determine catch associated with overfishing. National Standard Guidelines suggest that Councils should be more precautionary in the face of such uncertainty, leading to lower catch limits and potential economic impacts as a result of scientific uncertainty. Despite the obvious deficiencies of data-poor stock assessments, the National Standard Guidelines require annual catch limits for all stocks, with few exceptions.

The New England skate complex offers an example in which fishery landings cannot be identified by species. Mixed-species catch limits are required to meet separate-species management objectives for ending overfishing and rebuilding overfished stocks. In such data-poor situations, catch limits are largely based on expert opinion, and their performance for meeting fishery management objectives is unknown. Requiring catch limits for data-poor stocks can result in fisheries constraints that are not consistent with the objectives of avoiding overfishing, rebuilding stocks or achieving optimum yield. For example, the two targeted species of New England skates rebuilt under a 20,000 lb trip limit, but implementation of the catch limit system required a reduction to 500 lb per trip after the stocks rebuilt.

Other stock assessments are more informative than those for data-poor stocks, but still have substantial uncertainties that cannot be quantified or used to determine catch limits. A troubling feature of many stock assessments in each coastal region of the U.S. is the lack of consistency from one stock assessment to the next. Retrospective inconsistency is the change in perception of previous stock size or fishing mortality when new data are added to the assessment. Managing a fishery based on an assessment with retrospective inconsistency involves setting an apparently appropriate catch that in retrospect caused substantial overfishing or foregone yield.

The fishery for Georges Bank yellowtail flounder, one of the principle groundfish stocks off New England, is an example of the frustrating and costly impact of retrospective inconsistency. From 1999 to 2006, the fishery caught less than the catch limit advised by the scientific process in each year. However, the 2011 stock assessment indicates that those apparently appropriate catches produced overfishing each year, in some years more than five times the overfishing threshold (Transboundary Resources Assessment Committee 2011). Despite efforts to correct the stock assessment, the retrospective problem continues to obfuscate perceptions of stock status and obstruct attempts to manage the fishery or rebuild the resource. After decades of overfishing, in the face of severe restrictions to the fishery, the assessment indi-

cates that the stock cannot rebuild within the desired timeframe, even with no fishery.

Beyond the need for frequent and accurate stock assessments, scientific support for catch limits involves in-season fishery monitoring that is timely enough to inform future catch limits and support fishery-dependent business decisions in a catch share management system. Several transitions to electronic monitoring have improved the timely collection and reporting of landings from commercial fisheries. However, other components of total catch such as commercial fishery discards, recreational fishery catch, and location of fishing effort are not well estimated, and estimates are not available in a timely fashion. Uncertainty and slow delivery of catch statistics precludes in-season management or adaptive fishing decisions to optimize catch allocations, incurring considerable costs to fisheries and fishing communities. In addition, accountability for overfishing is being implemented in a way in which fisheries “pay back” any catch that exceeds the annual catch limit in the form a reduced catch limit in the subsequent year. Such an implementation requires accurate in-season monitoring to allow fisheries to manage their own catch to avoid exceeding their catch limits and resulting accountability measures.

Inadequate catch monitoring is demonstrated by estimates of discarded catch in New England. The Northeast Region adopted a Standardized Bycatch Reporting Method for commercial discards that is based on data from at-sea observers (Wigley *et al.*, 2007). The stratification for observer sampling is stock area and fleet, which is too coarse to accurately estimate discards, often inferring ‘phantom discards’ (*i.e.*, estimates of discarded catch that are artifacts of the methodology rather than a reflection of actual catch). Many groundfish sectors are charged with discards against their allocation based on the Standardized Bycatch Reporting Method, because the stock-wide estimators assume that each vessel in the sector has the same discard patterns. Some vessels have rare discards that have been documented by NOAA observers and the NOAA study fleet, but these vessels are charged the fleet-wide stock-wide discard rate, and the sector is accountable for exceeding its catch allocation, even if the overage is an artifact of an inaccurate discard estimate. Furthermore, the Standardized Bycatch Reporting Method removes any incentive for individual fishermen to reduce their bycatch.

The Standardized Bycatch Reporting Method for yellowtail flounder bycatch in the scallop fishery is both slow and biased. Final estimates of bycatch in the scallop fishery were not provided until 7 months after the fishing year ended. The estimate of yellowtail discards in the 2010 scallop fishery was biased, because observers were more likely to sample off southern New England, where there are more yellowtail, than in the Mid Atlantic Bight, where there are fewer yellowtail. The Standardized Bycatch Reporting Method, which is more influenced by the southern New England bycatch rate, indicated that the scallop fishery had exceeded its yellowtail allocation. The accountability for such an overage in bycatch is to close large portions of the stock area for the entire year. By contrast, when updated observer data were appropriately stratified by region, the estimate of yellowtail discards was much less and led to the conclusion that bycatch was well within the limit. This example shows that the slow and biased application of the Standardized Bycatch Reporting Method would have falsely triggered costly accountability measures in the Nation’s most valuable fishery.

Several aspects of scientific uncertainty exacerbate the mixed-stock fishery problem. When stock assessments underestimate stock size, catch limits are lower than they should be, and fishermen have difficulty avoiding the species that have artificially low catch limits. Furthermore, when some stocks are rebuilding, their catch limits remain relatively low while the stock rebuilds, increasing the challenge to avoid rebuilding stocks while targeting healthy stocks. These problems are intensified when accountability measures further reduce the catch limits on rebuilding bycatch stocks, thereby increasing the mismatch between the catch limit and the species mix on the fishing grounds. Therefore, scientific uncertainty and catch limits with accountability prohibit mixed-stock fisheries from harvesting their allocated catch limits and form a wasteful management strategy with huge economic losses.

The mixed-stock problem severely limits the New England groundfish fishery from landing its total multispecies allocation. For example, southern New England winter flounder are behind schedule in the agreed rebuilding plan largely because of scientific uncertainties in the stock assessment, and only incidental bycatch is allowed. If rebuilding is successful, the challenge of avoiding winter flounder will be exacerbated. Furthermore, if catch limits are exceeded, the fishery will be held accountable in the form of further reductions in catch limits of a rebuilding stock. The catch limit for southern New England winter flounder is based on an estimate of incidental bycatch, but the 2010 fisheries exceeded the catch limit, and accountability measures are being considered for the overage. The fishery is being held ac-

countable because the observed incidental bycatch exceeded the projected incidental bycatch.

As a result of the mixed-stock problem, the groundfish fishery caught less than 40 percent of the allocated catch in 2010 (Kitts *et al.*, 2011). If the catch limits were accurate, and discards remained low for these species, the groundfish plan appears to have successfully ended overfishing. However, preventing overfishing is only half the job that management plans are mandated to accomplish. The other half of the mandate is to achieve optimum yield. Landings of haddock, plaice, pollock and redfish in 2010 were less than half of the catch limit (Kitts *et al.*, 2011b). Ending overfishing is a great accomplishment, but we need to refine fishery management plans to progress toward optimum yield.

A recent analysis of groundfish catch limits concluded that scientific information is available to support increased catch limits that do not undermine conservation mandates of the Magnuson Act (Massachusetts Marine Fisheries Institute 2010). The review of scientific analyses used to derive catch limits found that several decisions favored relatively low catch limits, and scientifically valid alternatives are available for direct estimates of the maximum sustainable yield reference point, alternative stock assessment models, smaller uncertainty buffers, and revised rebuilding objectives. Alternative scientific decisions support increases in catch limits for all New England groundfish stocks, with substantial increases for “choke stocks.” Increased catch limits for “choke stocks” would be more consistent with the availability of stocks on the fishing grounds and allow the fleet to achieve more of their allocation, thereby substantially increasing mixed-stock economic yield.

National Standard Guidelines suggest that catch limits should be based on each regional Fishery Management Council’s desired risk tolerance for overfishing. However, such risk management decisions require evaluation of economic costs and benefits that are not routinely provided by the scientific process. Although some economic data are collected from fisheries, the information is not comprehensive enough to evaluate costs and benefits of alternative catch limits, and economic analyses are limited to impact statements that are completed after management actions are decided. A broader approach to informing risk tolerance would be management strategy evaluation, which has only been applied to few U.S. fisheries in a cursory way. Ignoring economic aspects of alternative catch limits poses unknown costs to fisheries.

Now that catch limit systems have been implemented, their performance should be retrospectively evaluated with respect to meeting all ten National Standards for fishery management (avoiding overfishing while achieving optimum yield, applying best science, managing unit stocks, fair and equitable allocation, considering efficiency, allowing for variations, minimizing costs, minimizing impacts on fishing communities, minimizing bycatch, and promoting safety). More specifically, each expectation of NOAA’s catch shares policy (eliminating overfishing, achieving annual catch limits, producing more fish at lower costs, improving fishermen’s safety and profits, and reducing the negative biological and economic effects) should be confirmed through analysis of fishery and resource monitoring information.

In the context of inadequate scientific information for supporting New England fisheries management, there are several potential solutions to help improve the scientific capacity for supporting annual catch limits. Solutions can address both aspects of the problem: the adequacy of scientific information and the implementation of the catch limit mandate.

- (1) Scientific resources can be increased or reprioritized to support more frequent and accurate stock assessments as well as more timely and accurate fishery monitoring data.
- (2) The peer review processes can be streamlined, using external expertise to solve scientific problems possibly by applying alternative approaches.
- (3) NOAA’s scientific capacity can be expanded and improved by partnering with universities and research institutes that have the human resources and infrastructure to help bear the burden of the new requirements of catch limits.
- (4) Each regional Scientific and Statistical Committee can be empowered to help serve the necessary peer review role and more importantly help solve some of the major scientific problems in stock assessments.

The demands on fishery science can also be reduced in several ways.

- (1) Exemptions from annual catch limits should be considered for stocks and fisheries for which catch cannot be reliably monitored.

(2) The mixed-stock exemption from catch limits and accountability measures should be considered for bycatch and rebuilding stocks to avoid the wasteful and costly consequences of applying those approaches to mixed-stock fisheries.

(3) More strategically, alternative management procedures, such as data-driven catch limits that are regularly reconsidered through management strategy evaluation, should be considered that take advantage of the best of fisheries science rather than emphasizing the worst of it (*e.g.*, Butterworth and Punt 1999).

In summary, I conclude that scientific information is insufficient to meet the needs of the catch limit system and catch shares policies in New England. Most stock assessments are too infrequent and too inaccurate to derive annual catch limits that avoid overfishing while allowing optimum yield. Major components of total catch, such as commercial fishery discards, recreational fishery catch, and location of fishing effort are imprecisely estimated and not monitored in a timely way to support in-season management and business decisions. Economic data and analyses are insufficient to evaluate risk-based catch limits. The scientific information required to support the fishery management system specified in the National Standard Guidelines and NOAA's catch shares policy is much greater than the current scientific capacity.

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Senator KERRY. Thank you, Mr. Cadrin.
Dr. Rothschild?

**STATEMENT OF BRIAN J. ROTHSCHILD,
MONTOMERY CHARTER PROFESSOR OF MARINE
SCIENCE AND TECHNOLOGY AND CO-CHAIR,
MASSACHUSETTS MARINE FISHERIES INSTITUTE,
UNIVERSITY OF MASSACHUSETTS DARTMOUTH**

Dr. ROTHSCHILD. Thank you very much. I'm going to abbreviate my testimony. I want to begin by saying that the management system in place has resulted in losses of landings, revenues and jobs, a controversial reallocation of wealth, and a failure to eliminate costly over and underfishing. To demonstrate this point, I have out-

lined six metrics. I'm going to review three of them with you to save time.

First of all, gross underfishing that has occurred under the Days at Sea system continues under the catch share system. Of the 70 kilotons that could be caught each year, only 31 kilotons are actually caught owing to restrictive regulations. This underfishing costs industry and society nearly \$132 million at the dock or \$520 million by the time the fish leaves the economy. There might be as many as 1,000 jobs that could be created by terminating underfishing.

My next point involves the quality of information, which was touched on earlier. Crucial overfishing indices are questionable. The average date of stock assessments is 2008. Many assessments are outdated. In other words, it is really unknown whether stocks that were at a high level in 2008 are at a low level in 2011 or vice versa.

And my third point of the six is that large overfishing buffers are costly and inhibit job creation. Overfishing buffers are set to ensure that the actual catches are less than the overfishing level so that there is low probability of overfishing. This is a measure of management performance since if the catch level is scientifically certain, then the buffer would be zero. But, in fact, the level of scientific certainty is evidently so low that the difference between the overfishing level and the annual catch is about 67 kilotons. This foregone yield has a value of \$220 million. Is it worth foregoing a catch value of \$220 million on the catch valued at \$97 million to prevent overfishing, which isn't being prevented anyhow?

In sum, we can see that these negative performance indicators cannot be consistent with the intent of Congress, that the cost of underfishing and buffers to prevent overfishing are far more important economically than the traditionally used indices such as revenues. The lessons learned is that it is not sustainable to implement fishery management plans in a rush, careless, ad hoc, piecemeal fashion.

We need, consistent with the Touchstone-Pate report, a master plan that provides time-phased specifics on improved communications, revised data collections, conduct of cooperative research, and achieving optimum yield. Anything less than a master plan will lead to addressing the wrong questions.

So let's, in conclusion, bring this all together. It appears that the prosecution of fisheries management is inefficient, is operating at a significant cost to the Nation in terms of jobs, food security, and welfare. There have been suggestions of ways to get the system back on track, but these suggestions have never seen the light of day.

I conclude that the agency, when it does respond, reiterates problems rather than providing solutions. It does not provide a time-phased response with a date of completion and a concrete deliverable such as a sorely needed master plan. It is for this reason that Congress has to strengthen its oversight by establishing an ad hoc commission or task force that can work on a northeast master plan, outline the actions that need to be undertaken, establish priorities, and review the deliverables.

It is crucial that this commission is populated with stakeholders, particularly the fishing industry. While we all recognize that the agency would be opposed to such a commission, we have to ask what the agency proposes as an alternative. After all, there is much at stake. We are squandering time, resources, and opportunity at a time of national economic stress.

Thank you very much.

[The prepared statement of Dr. Rothschild follows:]

PREPARED STATEMENT OF BRIAN J. ROTHSCHILD, MONTGOMERY CHARTER PROFESSOR OF MARINE SCIENCE AND TECHNOLOGY AND CO-CHAIR, MASSACHUSETTS MARINE FISHERIES INSTITUTE, UNIVERSITY OF MASSACHUSETTS DARTMOUTH

The catch-share system has been in place for 17 months. NOAA promised that the catch-share system would: "(1) . . . end the race to fish; (2) rebuild fisheries and sustain fishermen, communities, and vibrant working waterfronts; (3) increase conservation of species; (4) reduce the management costs; and (5) produce more and better data."

None of these promises have been fulfilled. In fact, the system has resulted in losses of landings, revenue, and jobs; a controversial reallocation of wealth; and a failure to eliminate chronic costly overfishing or underfishing.

The problems associated with the catch-share system have been reviewed many times. This hearing provides an opportunity to review the problems and fashion a better way forward. In my testimony this morning, I would like to consider what it takes to move ahead. First, I look at past performance and show that disregard of the intent of Congress is associated with limiting fisheries-management performance. Second, I discuss solutions which relate to both substance and implementation.

It is axiomatic that fishery management must follow the intent of Congress as spelled out in the Magnuson-Stevens Act (MSA) and supported by the National Environmental Policy Act (NEPA) and other legislation. If the fisheries do not follow the intent of Congress, then one would expect poor performance metrics. If we were from Mars and visited Earth and observed the fishery management system in New England, we would have to conclude that Congress intended to

- (1) create a management system in the northeast that wastes 100,000 tons of fish per year worth hundreds of millions of dollars, while failing to create hundreds of jobs;
- (2) disregard the economic and social impact of fisheries management;
- (3) unfairly allocate fish to some sectors to the disadvantage of other sectors; and
- (4) ignore valid scientific findings, and suppress discussion regarding the magnitude of fish stocks.

Of course, Congress never intended to generate a fisheries management system that wastes huge quantities of fish, disregards fishing communities, is inherently unfair, and ignores science.

If in fact the intent of Congress were followed, we would have a considerable improvement in performance metrics for fisheries management. The fact that management performance needs to be improved is reflected in management-performance statistics. These include: (1) magnitude of overfishing and underfishing, (2) quality of information necessary for overfishing determination, (3) costs of the overfishing buffer, (4) landings and revenues, and (5) vessels and jobs.

For example, a large number of stocks are subject to overfishing or are overfished. In addition, there is gross underfishing. Of the 70KT that could be caught each year, only 31KT are actually caught owing to restrictive regulations. This shortfall costs industry and society nearly \$100M at the dock, or \$400M by the time the fish leaves the economy. There might be as many as 1000 jobs that could be created by terminating underfishing.

The quality of information on crucial overfishing indices is questionable inasmuch as the average date of stock assessments is 2008. In other words, stocks at a high level in 2008 could be at a low level now, or vice versa.

Additional costs are induced by an overfishing buffer. The idea of an overfishing buffer is to set the actual catch less than the overfishing level so that there is a low probability of overfishing. This is a measure of performance since if the catch level was scientifically certain, then the buffer would be zero. But in fact the level

of scientific certainty is so low that the difference between the overfishing level and the annual catch limit (ACL) is about 70KT, which has a value of about \$105M. The uncertainty is twice the level of the catch and results in forgone yield worth of \$105M. Is it worth paying \$105M to prevent overfishing which isn't being prevented anyhow?

Important indicators of performance are landings and revenues. Groundfish landings have declined by 12MT under the catch-share system, while revenue has declined by \$2M. However, the economic reports are inadequate because economic performance needs to be judged on the basis of revenues less costs. Cost data are not generally available and, so contrary to National Standard 8, even at this point in time, economic costs are not being monitored.

The numbers of vessels and crew have been declining for years. The decline continues, and perhaps increases, under catch shares. The problem is that we cannot look at only the fishing or producing sector. Declining vessels and crew have a big impact on shore side businesses and welfare.

In sum, we can say that the promises made by the agency have not been fulfilled; fisheries management is not consistent with the intent of Congress; and performance metrics are depressing. On top of this, trust has broken down. What can we do to move forward? There are substantive issues and implementation issues that need to be taken into account.

A major problem with the implementation of the catch-share system is that its implementation was in many ways rushed and careless. A striking example is that any elementary economics course would tell us that the catch-share system, if left on its own, would result in hyper consolidation. Now, 17 months later, the council is dealing with caps to prevent hyper consolidation.

The lesson learned is that we cannot afford to move into the future in an ad hoc piecemeal fashion. We need a master plan to improve communications, revise data collection, conduct cooperative research, and achieve optimum yield. Anything less than a master plan will lead to addressing the wrong questions. These observations are consistent with the Touchstone-Pate Report (TPR).

There are critical issues that need to be addressed in the master plan. These relate to the measures of performance outlined above. How can we use the shortfalls in scientifically permissible landings to create jobs and economically improve our fishery output? Examples of critical issues include:

- (1) Reevaluate Closed Areas—Thirty percent (30 percent) of Georges Bank is closed to fishing. The benefits of these closures are not clear. Enormous costs are involved in keeping the areas closed. An analysis of the efficacy of the closed areas along with alternatives is needed.
- (2) Data—The entire data information system needs to be upgraded as specified in the TPR. An analysis of the data information system, along with costs and timing, is necessary.
- (3) The Bycatch Problem and Mixed Species Problems—Bycatch issues constrain almost all fisheries from taking optimum yield. The yellowtail flounder-scallop interaction is a critical example.
- (4) Reevaluate Scallop Management—Scallops are our most important fishery. Yet, concerns are voiced regarding whether optimal yield is being taken and whether the closed area's stocks are being effectively managed.
- (5) 2010 Year Class of Haddock—There is a rumor that the 2010 year class of haddock is very large. A plan needs to be tabled for efficient utilization of the 2010 year class, particularly taking into account the fact that poor utilization of the 2003 year class resulted in losses of hundreds of millions of dollars.
- (6) Stock Assessments—The stock assessment settings have become much more complicated owing to ACLs. In addition, councils have a difficult task in evaluating recommendations because they do not have a fully transparent analysis that demonstrates all of the assumptions, assertions, and choices made. This crucial topic needs extensive review for incorporation into the master plan.
- (7) Flexibility—Many regulations are unnecessarily rigid. An analysis needs to be undertaken to evaluate areas where flexibility can be helpful.
- (8) Ocean Environment—It is becoming clear that environmental variables are critical to increasing and decreasing stocks. A white paper needs to be developed to incorporate a national program on the relation of the ocean environment to stock dynamics into the master plan.

It is not enough to just produce a master plan. Management and communication skills are required to implement it. There are clearly shortfalls in management and communication skills. In fact, these were identified in the TPR. We basically agree

with the TPR. However, two additional observations are necessary. First, TPR deals with interactions among the council, the center, and the regional office. It is striking that the industry is not explicitly included in this mix. Second, the response to the TPR, as reported to the council, did not fully cover the TPR's recommendations, particularly omitting a time-phased action plan.

One of the big difficulties in working with NOAA is its lack of responsiveness. Not only is NOAA not responsive to the people with whom it must work, it is also not responsive to Congress.

For example, Congressman Frank met with Administrator Lubchenco and others in early October 2009 to discuss critical issues facing the fishing industry. Some have been overtaken by events, but others have not really been dealt with. Congressman Frank, in communicating with NOAA, stated that, ". . . despite the importance of NOAA's fisheries mission, it seems fraught with a lack of responsiveness and a management process that is slow to react." Two years later, outstanding requests for crucial information on the closed areas, 10 year rebuilding schedules, and economic data have gone unanswered. In his letter, Congressman Frank said, ". . . the biggest fear I have is the real threat of significant consolidation." Only now, 17 months after the initiation of the process, fishery managers are beginning to worry about consolidation caps.

So now let us bring this together. It appears that fisheries management is being prosecuted at a great cost to the Nation in terms of jobs, food security, and welfare. There have been many suggestions of ways to get the system back on track. But these suggestions have never seen the light of day. We conclude that the agency, when it does respond, reiterates the problems rather than provides solutions; it does not provide a time-phased response with a date of completion and a concrete deliverable such as a report or master plan. It is for this reason that Congress has to strengthen its oversight by establishing an ad hoc commission or other entity that can work on a Northeast master plan, outline the actions that need to be undertaken, establish priorities, and review the deliverables. It is crucial that this entity is populated with stakeholders, particularly the fishing industry. While we all recognize that the agency would be opposed to such a commission, we have to ask what the agency proposes as an alternative. After all, there is much at stake and we are squandering time, our resources, and opportunity at a time of National economic stress!

SUPPORTING MATERIAL

TRENDS IN THE NEW ENGLAND'S FISHERIES

by Brian J. Rothschild and Emily F. Kelley

I. Stock Status

According to the 2010 Report, "The Status of U.S. Fisheries Report to Congress," ten stocks in the New England region are subject to overfishing, and sixteen stocks are overfished (see Table 1). These status determinations are based on the most recent assessment of each stock, or stock complex. It should be noted that for the stocks managed under the New England Fishery Management Council (independently or jointly with the Mid-Atlantic) the average year of the most recent assessment is 2008 (utilizing data through 2007). The most recent assessment occurred in 2010 utilizing data through 2009 and the oldest assessment in use is from 2003 (which utilized data from 2002).

Table 1. Overfished Stocks and Stocks Subject to Overfishing

Council	FMP	Stock	Overfishing condition	Overfished Condition		
				Overfished	Approaching	
New England	Atlantic salmon	Atlantic salmon *		x		
		cod—Georges Bank	x	x		
		cod—Gulf of Maine	x			
		Atlantic halibut		x		
		Atlantic wolffish		x		
		ocean pout		x		
		white hake	x	x		
		windowpane—GOM/GB	x	x		
		Northeast Multispecies	windowpane—SNE/MA	x		
			winter flounder—GB	x	x	
			winter flounder—SNE/MA	x	x	
			witch flounder	x	x	
			yellowtail flounder—Cape Cod/GOM	x	x	
			yellowtail flounder—Georges Bank		x	
			yellowtail flounder—SNE/MA	x	x	
		Northeast Skate	thorny skate—Gulf of Maine		x	
			smooth skate—Gulf of Maine		x	
Mid-Atlantic	Atlantic Mackerel, Squid, and Butterfish	butterfish		x		

*No fishing is allowed in this fishery or incidental harvest is limited to levels necessary to meet Endangered Species Act (ESA) requirements. A Final Recovery Plan for the Gulf of Maine District Population Segment of Atlantic Salmon has been developed under the ESA.

Table 1 (*above*) depicts fish stocks in the Northeast Region that are subject to overfishing, are overfished, or are approaching an overfished condition. This table was obtained from the 2010 report; The Status of U.S. Fisheries Report to Congress.

II. Catch Limits—“A Costly Insurance Policy”

In the United States requirements stipulated in the 2006 reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (MSRA) have made the development of annual catch limits a priority. The MSRA strengthened the objectives of National Standard 1, specifically the obligation to prevent overfishing, and rebuild overfished stocks. Regional Councils are now required to establish a mechanism for determining annual catch limits (ACLs) and accountability measures (AMs) for all federally managed fisheries (DOC, pp. 68). Table 2 depicts the catch limits associated with the stocks managed under the Northeast Multispecies Fishery Management Plan.

The Overfishing Limit (OFL) is the level of catch that corresponds to Maximum Sustainable Yield (MSY), from this reference point the Council is required to set an Acceptable Biological Catch Limit (ABC) and Annual Catch Limit (ACL). Between each of these levels are buffers to account for scientific and management uncertainty—an “insurance policy” against overfishing. In New England, for most stocks, the buffers were not based on any analysis of uncertainty or risk.

The cost of precaution is significant. The annual catch limit, for groundfish, is 51 percent of the overfishing limit. The difference, based on the average price of groundfish in 2010, is worth approximately 220 million dollars. The actual realized catch is even less (about one third of the OFL).

Table 2. Catch Limits

Stock	OFL (MT)	U.S. ABC (MT)	Total ACL (MT)	Groundfish Sub-ACL (MT)	2010 Groundfish Catch (MT)
GB Cod	6,272	3,800	3,620	3,430	2,829.7
GOM Cod	11,089	8,530	8,088	4,567	3,843.1
GB Haddock	80,007	44,903	42,768	40,440	8,340.2
GOM Haddock	1,617	1,265	1,197	825	377.7
GB Yellowtail	5,148	1,200	1,169	999	757.6
SNE/MA Yellowtail	1,553	493	468	332	171.9
CC/GOM Yellowtail	1,124	863	822	779	596.7
Plaice	4,110	3,156	3,006	2,848	1,536.4
Witch	1,239	944	899	852	725.3
GB Winter	2,660	2,052	1,955	1,852	1,391.2
GOM Winter	441	238	230	158	106.1
SNE/MA Winter	1,568	644	605	520	
Redish	9,899	7,586	7,228	6,846	2,151.2
White Hake	4,130	2,832	2,697	2,556	2,259.8
Pollock	5,085	3,293	3,148	2,748	5,601.1
N. Windowpane	225	169	161	110	
S. Windowpane	317	237	225	154	
Ocean Pout	361	271	253	239	
Halibut	119	71	69	30	
Wolffish	92	83	77	73	
<i>Total</i>	137,056	82,630	78,685	70,358	30,688
<i>% of OFL</i>	100	60	57	51	37
<i>Value (USD,\$)</i>	435,105,731	262,321,873	249,797,852	223,362,487	97,423,861
<i>Loss: OFL—X (USD,\$)</i>	0	172,783,859	185,307,879	211,743,244	337,681,870

Table 2 (above) depicts that Overfishing Limit (OFL), U.S. Acceptable Biological Catch (ABC), total Annual Catch Limit (ACL), the groundfish sub-component of the ACL, and the known groundfish catch. All weights are in units of metric tons (denoted by MT). Blanks in the under groundfish catch are stocks for which catch data is not yet publicly available. The value of each category was calculated utilizing the average price of groundfish in 2010 (\$1.44). Loss is calculated as the difference between the OFL.

III. Landings and Revenue (Outputs)

Tables 3 and 4 depict the groundfish landings and revenue from 2007 to 2010.

Table 3. Groundfish Landings 2007–2010

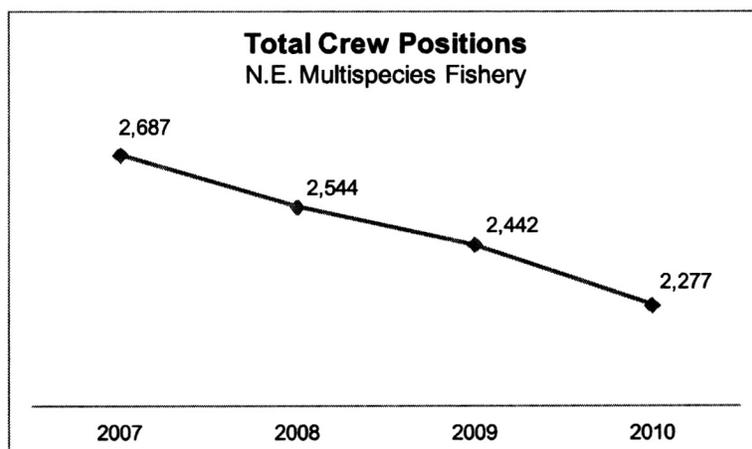
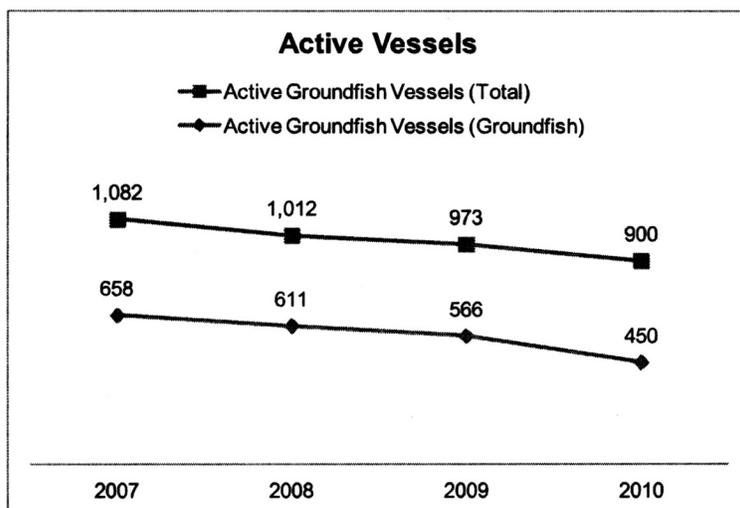
Year	Groundfish Landings (MT)
2007	64,003,776
2008	72,162,445
2009	70,568,091
2010	58,492,204

Table 4. Groundfish Revenue 2007–2010

Year	Groundfish Gross Revenue
2007	\$89,055,085
2008	\$90,131,938
2009	\$85,088,241
2010	\$83,293,667

Prices increased significantly for all species, including groundfish. The following excerpt is from the 2010 Sector Year-end report. “Nominal yearly average prices of combined groundfish species declined from \$1.43/lb in 2007 to \$1.23/lb in 2009 (Figure 8). In 2010, the combined groundfish average price increased to \$1.44/lb. The yearly average price for combined non-groundfish species also increased in 2010 to \$1.20/lb from \$1.11/lb in 2007 and \$1.00/lb in 2009” (NMFS, 2011).

IV. Industry Indicators



Senator KERRY. Well, thank you all very much. I know you felt a little squeezed there, but I think we're going to have a productive time in the Q&A so we can get out a few things here.

Let me kind of go to the core of something here if I can. You know, having been struggling with this Magnuson Act since the 1980s when I arrived there in 1985, we rewrote it in 19—it was originally written in 1976. We rewrote it again in a major way in 1994, passed in 1996. But it's pretty democratic, folks. It's one of the most democratic regulatory regimes we have in America.

We created not just protecting the U.S. economic zone, three miles and then 200 miles offshore, but, quote—I'm quoting from the Act—"we created eight regional fisheries councils to manage the living marine resources within that area." And on that marine council, there's the National Marine Fisheries Service designator; there's the principal state official with marine fishery management responsibility for Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut; and then there are 12 members nominated by the Governors of the New England coastal states with 3-year terms; and then there are four non-voting members, stakeholders, the Coast Guard, the U.S. Fish and Wildlife, the U.S. Department of State, and the Atlantic States Marine Fisheries Commission.

Now, Amendment 16 came from them. The Council manages itself, supposedly, and manages the fiscal—you know, the region. So I want to ask all of you what's happening here? I mean, why—is it the appointees? Are there too many diverse interests? It seems pretty—you know, I mean, I think Congressman Keating asked about having a task force to do this. I mean, that is a task force. It's a statutory task force. It's a management effort.

So what's wrong here? Why can't this democratic, local input, managed effort work? And if it can't work, what will work?

Mr. Cunningham, you're in the—

Mr. CUNNINGHAM. In the hot seat at the moment?

Senator KERRY.—first seat on that. Well, you're the beginning part of it. But I think everybody's got to weigh in.

Mr. CUNNINGHAM. Thank you, Senator. First of all, I guess—and I have stated this. I'm—

Senator KERRY. Would you agree it's meant to be a pretty democratic process?

Mr. CUNNINGHAM. It is an extremely democratic process. To some extent, it's one of the reasons it takes us a long time to get things done, because of the way the process has to work. As far as Amendment—

Senator KERRY. Is it fair to say that sometimes the competing interests actually prevented things from getting done?

Mr. CUNNINGHAM. No, it—

Senator KERRY. Or slowed it down sufficiently that—

Mr. CUNNINGHAM —it may have slowed it down. But it's also the process and the things that we have to deal with through NEPA, with the APA, with Magnuson, with the Marine Mammals Protection Act. There must be six or seven or eight statutes that we are required to adhere to. So, I mean, that whole process is fairly slow.

Senator KERRY. Well, how do we make it work is the question everybody's asking.

Mr. CUNNINGHAM. Well, from my standpoint—

Senator KERRY. Do we have to change some of those? Do some of those eight guideline laws need to be changed? Does there need to be a more streamlined time-frame for decisionmaking? I mean, what are the inputs that could improve this?

Mr. CUNNINGHAM. Well, I think a more streamlined time frame would be good. I think most of that probably comes down on issues, taking a serious look at NEPA.

Senator KERRY. At NEPA.

Mr. CUNNINGHAM. Yes.

Senator KERRY. Anybody else want to weigh in? I know, Captain, you'd probably like to weigh in on that. Let me let our practitioner speak up.

Mr. WELCH. Thank you. In my opinion, you know, it took 10 months—from the time Amendment 16 was voted in, we had 10 months to get it up and running. It was not enough time to handle the issues that are very important to the fishermen, like allocation. Around the world, where you go to a quota system, the battle lasts three to 5 years.

We didn't have the—you know, Amendment 17 after Amendment 16 was supposed to discuss allocation. It has not been done. It was just discussing permit banks. And the allocation issue is not on the table.

Senator KERRY. And is—I mean, is Washington to blame for that?

Mr. WELCH. You want to know what I—I feel that there are undue influences that affected the Council, outside sources that really controlled—got some control. And it was a person from one of these groups that got up and spoke to the fact that they can influence the Council. And that's—

Senator KERRY. So, in effect, what we've really got to do is we've got to look at the functionality of the Council itself. Is that true?

Mr. WELCH. Yes.

Senator KERRY. In your judgment.

Mr. WELCH. And that's why I like the idea of an independent—

Senator KERRY. Mr. Diodati?

Mr. DIODATI. Thank you. I agree that it is a very highly democratic regulation. I think it's also very sophisticated and inelegant. And we have gone around many times over the years in trying to demonstrate intent of the law, and there's always various opinions about what the intent is. But I think it really depends on how the legislation is applied.

I think that the Secretary of Commerce and NOAA Fisheries has a tremendous amount of latitude in taking the plans that are developed by the Council, but they approve—they implement them. There's another opportunity there to perfect what perhaps the Council didn't get right the first time around because it's not possible to do that in one or two boardrooms. It's not possible to decide a very difficult allocation procedure with stakeholders.

But I think they have an opportunity to come back in. They do the *Federal Register* Notice. But, you know, very often, I don't see them taking advantage of making—

Senator KERRY. So unlike Rick Perry, you think you ought to look to Washington to solve the problem.

Mr. DIODATI. I don't—I'm not suggesting Washington, but NOAA Fisheries and through the Secretary of Commerce.

Senator KERRY. NOAA Fisheries. Well, that's Washington, folks.

Mr. DIODATI. Well—

Senator KERRY. Gentlemen, just quickly, do you want to wrap—

Dr. ROTHSCHILD. Senator, thank you. I think there's a multiplicity of problems. And so I would pick one and point out that I don't believe that the intent of Congress, as written literally in the Magnuson-Stevens Act, is being dealt with. And, in particular, when you read the 10 National Standards, it tells you to do a whole variety of things, but there's a focus on only one of them, which is overfishing.

And one of the reasons that we're having so many problems is because we ignore, for example, National Standard 8, which is the economic and social fabric of the industry. How are we going to monitor the performance of fishery management if we don't take into account the social and economic aspects? I could go on and on, but I'll leave it at that.

Senator KERRY. Well, I understand that, and we've wrestled with that for a long time. Look, I—we're kind of going around in a circle, which is what bothers me about this entire thing. We don't have adequate science. We can't do this on a two and three-year basis. Senator Begich brought that up.

But it takes resources to do it otherwise, and not a lot of people are adding resources. We're working these days. So this is a real struggle between common sense and day-to-day reality of peoples' lives. You know, if you want to take the socioeconomic—I mean, the fact is we almost lost—as many of you know, we almost lost the striper 20 years ago. We had a 10-year ban on any fishing at all for stripers, correct? And it came back and came back way beyond peoples' expectations.

Now, you know, everybody understands the challenge of the overfishing. A lot of it's from these big fleets that come from elsewhere, not here. You know, it used to be they came up the coast from North Carolina and places—massive numbers of very large boats and so forth. And so if you're going to have an industry, you have to preserve the stocks, correct?

Dr. ROTHSCHILD. May I respond?

Senator KERRY. Please.

Dr. ROTHSCHILD. I'd like to respond, Senator. It's pretty clear that a very high priority is the annual assessment of stocks. So what we have to do is not say that we don't have the resources. What we have to do is examine the program and see whether we're applying our resources to the highest priority, which is annual assessment of stock. And it's not clear that that has been undertaken, and so that would be the next step.

Senator KERRY. Oh, I agree. I agree with that, and I think Senator Begich and I are going to—

Dr. ROTHSCHILD. That's why I wanted to—

Senator KERRY.—and Senator Brown—we will do everything in our power to move to that as fast as we conceivably can, because I think that could be a key that helps to unlock a number of things here.

Let me just take a moment to welcome—we've got—I should have done this earlier. But our Gloucester mayor, Carolyn Kirk, is here. Scott Lang, New Bedford mayor, is here. The former mayor is also here—John Bullard, and Angela Sanfilippo of the Fishermen's Wives sitting over here, Roger Berkowitz of Legal Seafood, who hosted our last meeting here. We welcome all of you. And I'm sure there are other stakeholders here, but I did notice them when they came in afterwards. I want to welcome all of them and, obviously, hope they will attend this next meeting we're going to have also.

Senator Brown?

Senator BROWN. Thank you, Senator. You know, since I've been working on this for a year and a half, we've had many meetings. I've hired somebody from the Council. We've gone around and been on the boats, met with the fishermen. And, you know, Senator Keating and—I'm sorry—Congressman Keating and Congressman Frank, you know, hit it right on the head. There's a complete lack of trust. There's a lack of answering—can't even answer a simple question.

And, Doctor, you're one of the foremost experts in this area, and you've already provided science, new science, to these agencies, and they've rejected it outright. Isn't that right?

Dr. ROTHSCHILD. Well, it's pretty complicated—something like that.

Senator BROWN. Well—

Dr. ROTHSCHILD. I want to be consistent with not providing a direct answer.

Senator BROWN. Well, based on the things that we've spoken about, I know that when we—in November, you and Mr. Cadrin and others provided Governor Patrick some information and Secretary Locke—evidence supporting increases in catch limits as well as fishery disaster declaration. The report showed approximately \$19 million of fish not being caught as well as \$21 million of direct economic losses. And you provided that to Secretary Locke and he rejected it, correct?

Dr. ROTHSCHILD. That's correct.

Senator BROWN. And, in addition, I have found, just in my dealings with this agency, that, you know, Dr. Lubchenco—you know, her lack of attention to the questions, the failure to be honest and forthright with us has led to the devastation in the fishing industry in this state and making it harder, quite frankly, for fishermen like you to do your jobs. And when you hear kind of like all of the political kind of boogie-woogie up here, where they say one thing and do the complete other—the complete opposite—they say, “Well, we need to make—the regulations are better. There's a light at the end of the tunnel.”

Listen, the only thing that's coming at the end of the tunnel is a train that's shutting—that's going to shut down the industry, because I've seen absolutely—has it gotten better? Yes, a little better. But the overregulation and the continuous uncertainty and interference, the enforcement, is still there. They've hired more enforcement folks, yet we have fewer boats. I don't know how we—how do you justify that?

But my—saying that, one of my main questions is also with the—Mr. Welch—the increased regulations and the regulatory burden. You indicated that if, in fact, certain things happen, you are not going to—you're going to be an armchair fisherman.

Could you just describe to the Committee, given the law enforcement abuses over the last 10 years—is there significant concern by you and others that you know about this increased compliance burden? And, if so, what do you want us to try to do to help you?

Mr. WELCH. There's a lot more regulatory paperwork and rules to follow under catch shares. As far as compliance and enforcement, the problem, I believe, was not with the agents on the dock. I've never really had a problem with them. I'm a victim of the enforcement. I got shaken down by the lawyers at NOAA. They knew I wasn't going to hire a lawyer, and they—I've had a really bad experience with them.

And the blame shouldn't go to the enforcement agents. It should go to the lawyers that shook people down, the lawyers that are still working for them. Dale Jones, who shredded 70 percent of his documents, is still working for the government. That's insulting to the public. But—now I forget the question, but—

Senator BROWN. How is the regulatory burden affecting you and others in the fleet?

Mr. WELCH. The regulatory burden is just eliminating the small boat fleet. The game with catch shares is you have to have a lot of quota to make any amount of money, and a majority of the fleet does not have a lot of quota.

Senator BROWN. And, Dr. Rothschild, you know, I've been fascinated, you know, meeting you and understanding everything that you've been working on since you've been involved in this issue, not only your efforts with the scallops, but obviously providing the science and the information to NOAA and other agencies so they can make a better decision.

In your opinion, is NOAA making fisheries policy based on science or something else?

Dr. ROTHSCHILD. I think the answer to that question is that the regulations are based on science. But it's not generally recognized how fuzzy the science is, so that there is a high degree of latitude in interpreting the science.

Senator BROWN. So, I mean, I know that—since we've spoken, what's the relationship that you've observed between Dr. Lubchenko's office, any of the folks working for NOAA—what is—has it been cordial, has it been constructive, has it been antagonistic? Could you please describe to us your personal observations?

Dr. ROTHSCHILD. Well, I would just reiterate comments that many people have made, that the people in the street have a great distrust and a feeling for a lack of transparency. And that's one of the reasons why the Preston Pate report was so important, because it focused on that. I read the presentations that were made to the Council, in terms of the agency's response to the Pate report, and I would have hoped that there would be one response rather than three separate ones, and that the response would have focused with a time-phased action plan on each one of the recommendations in the Pate report.

And I would also add that in addition to the kinds of things that are discussed in the Pate report, there are scientific issues which were raised in the Governor's report which could stand a joint reexamination. And, of course, the law enforcement—so there's a three-pronged issue. It's the law enforcement, which I really don't have to go into—that's beaten to death; the science problem, which is very big; and the everyday management communication issues.

And so there's really a lot to be done, and I am concerned that the agency itself can't do this by itself. It's not because anyone in the agency is bad or incompetent. It's just a huge task from within a bureaucracy to change the bureaucracy. And that's why I think that this task force or commission or an external group could work together with NOAA and end up with a result that we all desire, because if we don't do that, we'll be trapped in an endless morass of the bureaucratic operation.

Senator BROWN. Well, in closing, Mr. Welch and also Dr. Rothschild, it sounds like NOAA is well aware of how destructive, obviously, their policies have been. And we've talked—as you said, we beat them to death about the fining and also the lack of trust issue. Do you think it's time, Mr. Welch and Doctor, to turn the fisheries duties over to another agency, potentially, Fisheries and Wildlife or some other agency?

Dr. ROTHSCHILD. Well, I'll turn it over to Mr. Welch, but there has always been talk of putting NOAA into Interior, and that has been common discussion in Washington for years. And so if—

Senator BROWN. Is it time now? Is it time? I mean, it seems like—

Dr. ROTHSCHILD. Well, if they—

Senator BROWN. Well, how much time are we going to use reestablishing that trust?

Dr. ROTHSCHILD. Well, that's up—it seems to me that there's a good answer to that, which is it sort of depends on the response to this hearing, because there are things that could be done, and we have to learn what they are.

Senator BROWN. Well, if it's anything like the response to the last hearing—we're still waiting 5 months later for documentation, sir.

Dr. ROTHSCHILD. That's right. Right.

Mr. WELCH. Yes, I think that's an excellent idea. You would gain the trust of the fishermen again. I mean, you know how hard it is for you to get an answer. Imagine when I went up there. It's tough.

Senator BROWN. Well, thank you very much.

Senator KERRY. Go ahead, Mr. Diodati.

Mr. DIODATI. I just want to say to the point, Senator, that there are many examples of excellent working relationships between members of our organization and the National Marine Fisheries Service. Our scientists do work very closely together on stock assessments and research projects and other things. But what happens when you come to a meeting like this today, and Dr. Lubchenco suggests that it's the Commonwealth of Massachusetts' responsibility to demonstrate the impacts that this Federal program has had on our fisheries—I think that if Microsoft was telling their stakeholders, "Let us know what's wrong with our products

and tell us how to fix it," they wouldn't be as successful as they are today.

Senator KERRY. Senator Begich?

Senator BEGICH. Thank you very much.

Actually, Microsoft does do that. It's called product improvement. That's what they do. They get input from their customers. That's why they produce such an incredible product and control so much of the market.

But let me go on to the broader issue. First, to the two professors, in your analysis here, did you do extensive analysis of the Alaska experience? Because I will tell you, we—well, let me have your response first. Either one.

Dr. CADRIN. I'll draw on my experiences from the New England Scientific and Statistical Committee as well as interactions with all regional scientific and statistical committees, including the Alaskan one. The current National Standard guidelines were largely tailored to emulate what's happening in Alaska with the North Pacific Council, in which the Scientific and Statistical Committee is the peer review process for the annual stock assessments. They are integrated into that process much more so than in New England.

There are many aspects to Alaska's—there are some that would carry over well here, in which there are annual catch limits that are set as defaults. They are modified by scientific information as it comes forward, and so what you have is a much more responsive system than we have. We're in the process in this region of retooling to come up with more frequent operational assessments, but that's slow coming. And until those are producing regular science, it's really the fishermen that are paying the price in the form of lower catch limits.

Dr. ROTHSCHILD. I have some experience in Alaska. I worked on king crab and salmon in Bristol Bay, and I was also at the University of Washington for a number of years. And the difference between the Alaska experience and the experience here on the East Coast is like day and night. There's a greatly increased trust. People work together in the North Pacific. It's really a system that works well, even though there are problems with the crab rationalization and things like that.

Senator BEGICH. But I would argue that that was not always the case.

Dr. ROTHSCHILD. That's true. That's right.

Senator BEGICH. I can tell you story after story where, you know, we hated Seattle.

Dr. ROTHSCHILD. That's right.

Senator BEGICH. We hated the Japanese that would steal our fish.

Dr. ROTHSCHILD. I was in Seattle then and I felt the heat. Right.

Senator BEGICH. So I guess here's my point, and that is—and I'm glad I'm here in one aspect to hear a lot of the concerns in New England. But also I think there is a model or elements of a model that Alaska has that has worked successfully. I mean, that's why we now control over 50-plus percent of the market of this country, because sustainability—we're having other challenges now, not overfishing in some cases—in most cases, actually. It is now because of climate change, like I said, a vacation of the waters.

I mean, Senator Kerry, I can go on a lot on these issues, but I won't. But that's our challenge. But I guess I want to caution here—and I guess, Mr. Cunningham, the North Pacific Fisheries Council that we operate under works well. It has some tough spots. There's no question. I've been to those 3-day meetings—and the aspect of an issue that takes a year or two or, in some cases, 8 years to resolve, because fishermen have such, you know, issues with what might happen or the outcome or the fear of what might have happened.

How much do you interact with other councils—and I'll use our council—in finding out best practices in order to succeed? In other words, at the end of the day, you know, I'm a believer in the Council process. Now, there are rough spots. Our Council, for example, has set up with the halibut issue a stakeholders group that works with them.

What do you do to improve your system? Because it's clear, at least just in my limited time here already, there is—between NOAA there's some distrust, but also between the process, because no one would be recommending a task force if you were doing your job 100 percent. So help me understand this.

Mr. CUNNINGHAM. Well, first of all, to your question about do we interact with the other councils, in particular, the North Pacific Council, the answer is yes, we do. We have two meetings a year with them—essentially all of the councils—

Senator BEGICH. All the councils.

Mr. CUNNINGHAM.—councils getting together. If there are issues that we need help on that are something that they've already done, we've gone to them. We had people come from that council for workshops before we instituted Amendment 16 and the whole—that process. So, yes, we interact on an ongoing basis.

Senator BEGICH. Do you use stakeholder groups at times set up around certain species in order to get input and utilization of that in your decisions?

Mr. CUNNINGHAM. Yes. And, in fact, we had—it was over 60 meetings with stakeholders in the process of putting Amendment 16 together.

Senator BEGICH. OK. One question that came up in our last panel—the rollover issue. You said you were going to move that into your agenda somewhere.

Mr. CUNNINGHAM. That's correct.

Senator BEGICH. When?

Mr. CUNNINGHAM. We have a priority setting for all the actions that we will work on in 2012 coming up in November.

Senator BEGICH. Will this be—when you say priority setting, that means you're setting an agenda. So is this like a December meeting? Is it a quarterly meeting? When will you go after this issue? It seems like there's some strong interest here, and it seems like the agency wants to do this.

Mr. CUNNINGHAM. If it comes as a priority, a set priority, we will start to work on it immediately after the November—

Senator BEGICH. Do you think it's a high priority?

Mr. CUNNINGHAM. Yes, I do.

Senator BEGICH. OK.

Mr. CUNNINGHAM. That's why we already have the provision, but—

Senator BEGICH. But you've got to move forward with it is what I understand.

Mr. CUNNINGHAM. No, we already have it. It's a part of the law. They get a 10 percent rollover, but we're looking at the possibility of increasing it under certain species.

Senator BEGICH. Right.

Mr. CUNNINGHAM. Because as was indicated, somewhere around 93 percent of all of the underages are concentrated in three stocks, and those are robust stocks.

Senator BEGICH. And has the Commission taken a position on this before? It's my understanding you have and you rejected it to increase the capacity.

Mr. CUNNINGHAM. Increasing the rollover?

Senator BEGICH. Yes.

Mr. CUNNINGHAM. It has been discussed and did not move forward.

Senator BEGICH. So if you put it on the list, and it just goes on the list—but, I guess, here's my point. Let me be more direct here. It seems like there is agency support—which for NOAA to support something of this nature indicates they feel very confident of the science with certain parameters to increase it above 10 percent. That gives—should give you a great opportunity to make this happen rather than have it up on the agenda to discuss with no action that moves to a positive. Do you think you can move it to a positive? Do you feel confident you can move it to a positive outcome?

Mr. CUNNINGHAM. I feel confident that we can move ahead with it somehow. I can't determine 18 different votes on there, and I can't sit here and say to you I can guarantee them.

Senator BEGICH. But—

Mr. CUNNINGHAM. It is something that will be discussed for certain.

Senator BEGICH. I'll pause there. I just—I know the experience I've had with our Pacific—our council, and, you know, there are tough calls you have to make. And, you know, this issue seems so easy in a lot of ways—this 10 percent rollover issue, adding additional quota based on certain criteria—that it would be such a positive to the fishermen to help as you move forward to this larger—because I am a believer, just so Mr. Welch understands this—we have had success around these quotas, around catch shares—hard numbers too.

We have had great success in our fisheries that was being devastated by overfishing. I can tell you the halibut—we had 5,000 fishermen at one point. We've consolidated 2,500. They used to fish 2 days for 24 hours. That's it. Now they fish for 10 and a half months. We get premium dollar, and it is sold around the world.

We have to deal with a third element, which is subsistence hunting. So we not only have recreational, we have commercial and subsistence. So we have a complicated process more so than most communities. So I'm a believer in this, so I would just encourage you to make some—on this one, it seems such an easy—

Mr. CUNNINGHAM. Could I make one just quick follow up comment?

Senator BEGICH. Sure.

Mr. CUNNINGHAM. Looking at the projections for the second year of sector operations, there's going to be a much smaller percentage of leftover tax. The projections look like they're going to get a lot closer to them this year. Some of that has to do with the second year of this operation. People are getting used to a new system and understanding how to make it work better for them.

Senator BEGICH. Very good. Thank you.

Senator KERRY. Thank you. Thank you very much, Senator Begich, for an important question.

Congressman Frank?

Mr. FRANK. On the question of where this regulation ought to be, I am struck by this, and I have to say—and we have a serious problem here. Dr. Lubchenco obviously had to leave. But the contrast between her statement of almost self-congratulation and what we hear from everybody else is stark. I mean, the industry is hurting, and she's—she cherry-picked the statistics. And I would have said this to her if she had still been here.

You know, Senator Brown talked about changes. Most Federal agencies are somewhat advocates of the people in their name. The Veterans Administration, the Department of Veterans Affairs, the Small Business Administration, the Department of Agriculture—they're pro-farmer. The Veterans Affairs Department is pro-veteran. The Labor Department, even in a Republican administration, would have a good relation with labor. In a Democratic administration, Commerce is supposed to have a good relation with business.

This is—there are only two regulatory agencies I can think of that have a genuinely sort of hostile attitude toward the people under their control, the National Marine Fisheries Service and the Drug Enforcement Administration, because there's almost the same degree of "you're guilty" on the part of NMFS toward the fishermen as there is in the DEA toward the drug dealers. And it's really very striking and it undermines—again, we're a free society. You are not going to enforce everything. You need to have some cooperation.

And I will say again we have asked—Congressman Tierney is taking a lead in this—that the Coast Guard administrative law judges not be the ones adjudicating Coast Guard prosecutions. And Commerce promised us they would change that and they haven't, and we have to get back to them. I know you know we have a secretary who moved, but that has to be done.

Let me now ask Mr. Welch—you suggested a strong question. You said one of the agencies got up at the Council and talked about the influence over council decisions. What agency?

Mr. WELCH. Environmental Defense.

Mr. FRANK. Well, I think that's a very important point to make. Let me ask also—and, by the way, I think they have been wrong in the past about some of these issues, including, as I said, the scallop issue. Look, the key here is the amount of fish that can be caught. And it is overwhelmingly clear to me when we talk about every decision that is made—this is why I say that NMFS has the same relationship to fishermen as the DEA to drug dealers.

Every decision is made with the interest of the fishermen almost considered to be adversarial. It's to let's make sure that there are enough fish, so that we get this point where, one, we acknowledge

that the science isn't good. But with that, we take, as Mr. Keating brought out in his questioning, the most restrictive of the possible alternatives, even though it's probably outdated.

Second, since that consistently leads to quota not being used, we limit the amount of quota we can reuse. I don't understand that.

Mr. Cunningham, you said that you stopped with the 10 percent at the Council. You didn't change it, and that next year you expect there to be less. Had there been—I'm sorry. I misstated you?

Mr. CUNNINGHAM. I don't expect it to be less than the 10 percent rollover.

Mr. FRANK. No, you expect there to be less unused catch.

Mr. CUNNINGHAM. Correct.

Mr. FRANK. So, yes, I understand that. What that suggests to me is that the 10 percent was unnecessary originally. Let me ask you, if the 10 percent had been 20 percent last time, would that have had any deleterious effect on the fishery? Suppose instead of keeping it at 10 percent, the Council had voted to go to 20 or 25. Would that now have had any deleterious effect on the fishery?

Mr. CUNNINGHAM. I don't have the information to make that determination.

Mr. FRANK. Well, I'm asking you to find out. My impression is the answer is obviously no, because if it were going to happen, you might have had a worse situation. And we have got to stop putting the—the reflex is, "Let's say no." The reflex is, "Let's not have a catch." And that especially indicates—because, look, I—and I am proud of my environmental record. We're not talking about permanently fouling anything. We're not talking about people dying from bad air or being poisoned by bad water. We're talking about the rate at which fish reproduce themselves.

And we plucked this arbitrary 10-year number out of the air and put it into the statute. No one will defend that 10-years as scientifically valid. They say it's valid because it's in the statute. We ask people like Dr. Lubchenco, "Will you help us change the statute?" The answer is no.

But then with this—and, yes, I agree we—and, by the way, the fishermen agree—I don't know a single fisherman who wants to be the last person to fish. I don't know a single fisherman who doesn't hope that fishing will go on for generations. So they want the fish to reproduce. But we take this arbitrary case of—not arbitrary, but inexact issue about reproduction, we freeze it at 10 years, and we freeze it here and we freeze it there.

Let me ask all of you—if we were to—and I think this is critical. First of all, we say that the quota should not stay at 10 percent.

Mr. Cunningham, I have to say I hope very much the Council will be willing to change that. A council which is going to stick with that rigid 10 percent figure, which no one justifies in scientific terms, will make me even more skeptical of the process.

But, second, the 10-year in the Magnuson Act—we changed it in the Canadian boundary, and I see no evidence that that's endangering the fishing up there, or even the Canadians who are not living with the 10-years. My final question—can anyone tell me what the scientific justification is for a rigid 10-year with very limited exemptions, and if not, would you support giving the same kind of

flexibility in the basic Magnuson Act that we have with regard to the Canadian border? And let me start with Mr. Welch.

Mr. WELCH. I don't know where it came from. The conspiracy theory in me is that it gives environmental groups the ability to continually attack the fishing industry and say we're overfishing. From a harvester—and I really am concerned about the stocks—there is no reason we can't make that 15 or 20 years, as long as we're not going backward and we're moving forward—

Mr. FRANK. Mr. Diodati?

Mr. DIODATI. Yes, I agree. I agree with that. I think the time line is irrelevant and it's really whether or not we're sustaining or moving forward.

Mr. FRANK. Mr. Cunningham?

Mr. CUNNINGHAM. I concur. I've always said that the 10 years does not have any scientific basis. But neither does 15 or 20 years. So I think there needs to be some other mechanism for—

Mr. FRANK. No one is taking this away from them. See, we've got—I'd like to put you in the Department of Agriculture. That's where you'd really belong. We should call that the Department of Food Production. Maybe we can get them to throw us a subsidy every so often.

But what we would do—no one is talking about taking away the discretion of the department to say, "Wait a minute. There's too much fishing. We're going to run out of fish, and we've got to slow it down."

Mr. CUNNINGHAM. And as far as matching the Canadian model, those changes were made to keep us on an interactive basis—

Mr. FRANK. With the Canadians.

Mr. CUNNINGHAM.—with the Canadians, rather than have them walk away from—

Mr. FRANK. I understand that. But with the Canadians not following the 10-year, were they depleting the stock to the point of no—non-reproduction?

Mr. CUNNINGHAM. They don't manage in the same way we do.

Mr. FRANK. Were they depleting the stock to the point of non-reproduction?

Mr. CUNNINGHAM. The stock numbers are down a little bit, but—

Mr. FRANK. You're not going to answer it? Were they depleting the stock to the point where we were worried about non-replenishment?

Mr. CUNNINGHAM. Were they?

Mr. FRANK. The Canadians, the fishermen. Look, we—

Mr. CUNNINGHAM. I don't—

Mr. FRANK. I'll give you the answer.

Mr. CUNNINGHAM. I don't believe so.

Mr. FRANK. It's clearly no. The argument is we had to catch up with the Canadians, so we had to get to a situation where we didn't have the 10-year thing. They didn't have the 10-year limit, and no one has argued to me that because they didn't have the 10 years, they were at the point where they were depleting the stock.

Mr. Cadrin?

Dr. CADRIN. I would agree with the rest of the panel that the 10-year rebuilding deadline is not only arbitrary, but it's also auspi-

cious if—as soon as the fishery management is completely determinant of fishery productivity, and we know that Mother Nature has a large role in this as well.

Mr. FRANK. Dr. Rothschild?

Dr. ROTHSCHILD. I agree with everyone, particularly Cadrin.

Mr. FRANK. Well, that's one of the—what I plan to do—and I hope we can get this—is to amend that 10-year thing. That's the key. If we can amend the 10-year—and that's more flexibility to NMFS—I think a large part of this can then be resolved.

Thank you.

Senator KERRY. Congressman Tierney?

Mr. TIERNEY. Thank you very much. You know, I don't really think this is an argument about do we regulate or do we not regulate.

And, Mr. Welch, I'm almost positive that you didn't mean to infer that, that you really think the resource has to be regulated. It's all in the nature of the regulation and the enforcement and the openness that goes around it. Am I right?

And, Dr. Rothschild, the same thing with you on that.

So I was impressed, Dr. Rothschild, with three issues. Enforcement—and we've certainly been beating that. Somebody said we're beating a dead horse, really. If it was dead, we wouldn't still be beating it. But we're looking for the answers on that, and we're going to continue to press—I think everybody on this panel is—about accountability and about making sure we change the culture to one that tries to get civil cooperation before you start hammering down on the criminality aspect of it and treating everybody as if they're guilty before they're found to be violating.

The management and communication part of it—Dr. Rothschild, I agree with you totally. I happen to be, I guess, maybe the only one on here, but I think others may be inclined to think that way—that could change rapidly with a change in leadership, and I've argued for that for some time. There has to be an urgency to this issue, and there has to be a certain empathy.

I'm struck when you say, Dr. Rothschild and Mr. Welch, that maybe you want to change this to the Interior Department. One would think that the Department of Commerce would have more interest in small businesses and more empathy for them than perhaps you might expect out of Interior. And so that leads me to that point that maybe it's the leadership within NOAA or whatever that ought to be changed so that we get somebody in there who really does have empathy for it and understanding and wants to put some urgency into this and come down on the side of—err on the side of small businesses when there's a reasonable flexibility there, reasonable room to move on that than otherwise.

And last is the science and the assessments, and I think—you know, we've all talked about that, the need for resources. Senator Kerry is right on the button. You can't be, you know, whacking money out of one end of the discretionary budget, and then say, "Gee, I wish we had money for that."

So the other two things of that are technology and cost. The cost—Mr. Welch, you indicated that, you know, the industry is not ready to absorb the cost of monitoring, particularly Days-at-Sea or whatever. Is there a time period where you think the monitoring

would rightfully shift over to the industry? Is that a factor of time, or is there some other factor involved there? Mr. Welch?

Mr. WELCH. Based on the allocations that small boats are given, we're very frugal. We've always operated—we do our own maintenance, gear work. Everything we do ourselves. We cannot afford any more added costs to our business right now the way it is with the allocations we have.

Mr. TIERNEY. And is that an immediate issue, or do you think that'll change over time, or do you think that's the way it's going to stay?

Mr. WELCH. It depends on where the science goes and how the stocks rebuild and all that. Currently, I don't see the stocks getting to the point where we're going to be able to catch enough fish to pay for this. We're all going to have to go out and buy bigger boats.

Mr. TIERNEY. And I might ask, just generally, to the others, where is the technology on this, on the assessment issue and monitoring or whatever? Are we at a point where we expect there to be new technologies that are going to be helpful on that in the near future, or is this long-term?

Dr. CADRIN. I think there are technologies that are not only being developed but are being implemented in other parts of the world, British Columbia and Alaska and others, where we're using electronic monitoring and electronic recording, transmission, and also getting into the incentive systems of fishermen-reported data. So the technologies are definitely there.

It's a matter of operationalizing them and a willingness to solve problems from not only the Council but also from the regional office of NMFS and the Science Center to work together to solve these problems, use these technologies, rather than just maintaining status quo. And so there's no accountability in those parts. It's really the fisheries that are held accountable for lack of progress in implementing these technologies.

Mr. TIERNEY. Doctor?

Dr. ROTHSCHILD. One of the reasons that fishery management is so expensive is because we've created a management scheme that requires high technologies. And so what we need to do is go back to more simpler management schemes where you wouldn't need an observer on every boat, where you wouldn't—

Mr. TIERNEY. Can you give us an example of that?

Dr. ROTHSCHILD. Yes. Well, for example, the reason for an observer on a boat is to monitor, of course, what that individual fisherman does, and it would probably most likely have to do with discards. And so one technology that might have to do with discards is using a video recording, as people have suggested.

But, really, the right way to do it is to take a step back, look at what our budget is, what the requirements are, and develop a systems engineering approach to coming up with the best system, just like Boeing does with an airplane or Lockheed Martin. It's as complex as putting a man on the moon, and we need to approach it from an engineering and cost-effective point of view.

Mr. TIERNEY. Mr. Cadrin?

Dr. CADRIN. To follow up to your other question about examples of simpler, more robust management systems, we've talked about striped bass here today. That was successfully recovered, not

through catch shares and catch limits, but through other management implementations that were more suited to the fishery and the data collection there.

And we talked about scallops. That was not rebuilt under a catch share system. There was observer coverage that was suited to the status determination similar to the 1996 authorization of the act and its requirements. Groundfish—we've talked about ending overfishing and rebuilding several of the groundfish. That all took place under relatively low observer coverage. It's these catch limits and catch share systems that require this more information. We can achieve the mandated conservation objectives without this data hungry requirement.

Mr. TIERNEY. Thank you.

Senator KERRY. Congressman Keating?

Mr. KEATING. Well, thank you. Thank you, Senator.

I think it's clear that if we're looking at a bumper sticker for days here, in part, you know, one of those stickers any ways would be the fact that the science and data are slow, and as a result it's not accurate. But I think this, from my perspective, boils down to something Senator Kerry said, that we have to incorporate common sense here. And I like fish. I really like fish. I hope there's more fish. I like jobs. I really like jobs.

And my question is to Dr. Rothschild. You said we could create 1,000 jobs or avoid losing 1,000 jobs. Could you give us a little more detail? And can part of that be what I talked about before with the—using the most restrictive, the most conservative way of looking at this imperfect data? If you just looked at it in the middle, a balanced approach to that, would that help?

Dr. ROTHSCHILD. You don't have to look at—I mean, eventually, you want to look at imperfect data. But right now, know that 140,000 tons of fish could be caught without breaking any conservation regulations. But only a small fraction of that is caught because of the regulations. It is true that this relates to two or three species, like redfish and haddock.

But if we could come up with some schemes—and we should be able to—to catch these fish, they're worth hundreds of millions of dollars and it's left in the water. And those hundreds of millions of dollars translate into a lot of jobs. I don't know how many, but it is a lot of jobs.

The other issue is in the Governor's report—and Dr. Cadrin was instrumental in this—we pointed out that the catch level could be increased by approximately 30 percent. And we've never really had the kind of discussion we should have on that, but that would change 140,000 tons to about 180,000 tons. And so there are a lot of fish that are being wasted.

So if you look at managing fish as if you were managing a department store, you would want to utilize everything, not conserve it. So, basically, there are hundreds of millions of dollars a year, to summarize, that would be available to the economy, but they aren't because of fishery management.

And I have in my written testimony the rumor that the 2010 year class of haddock is bigger than the 2003 year class of haddock, and if that's true, we should be gearing up right now to develop mechanisms so that fishermen can catch those, because the 2003

year class was worth about a billion dollars, and we only utilized a small fraction of that.

Mr. KEATING. OK. With that, Senator, I have time left, and this time, I'm going to yield it back while I have some to yield.

Senator KERRY. Thanks a lot, Congressman. I really appreciate it.

We're going to wrap up momentarily. Is there any—I want to ask Senator Begich to respond for a minute. He was commenting about the bycatch issue and the Alaska experience. I think it might be worthwhile just to—

Senator BEGICH. Just a quick comment to Congressman Tierney—and you mentioned it, actually, Professor Cadrin—that Alaska is experimenting with some new technologies in order to manage the fisheries much better, and some of it is video, some of it is electronic. And in some cases, we've been able to reduce down bycatch. Even net sizes and techniques that we're utilizing there—which, of course, we think these will be helpful, not only, of course, for our fisheries, but around the globe.

So I wanted to echo that and tell the Congressman there are some interesting ideas that are being pursued. I will underline this by saying one of the organizations within the Federal Government which is getting dramatically reduced is the one that expends money in this innovation. And we have to be very careful, but this innovation is critical for us to manage these fisheries better. But part of that play is with our folks in NOAA and within the fisheries.

Senator KERRY. Thank you very much. As we wrap up, let me just make—I want to thank Sam Dallaire from the Senate President's staff, and I also want to thank Claire Saleski, Shawn O'Neal, and Amy Carrigan from my staff. And I want to thank the Commerce Committee staff for their cooperation and help in being able to come here today.

Just a couple of comments, if I may, quickly. One, I don't know any fisherman who doesn't automatically understand—certainly the fishermen in Massachusetts, the small fishermen—sometimes you wonder about the factory and fleet folks who step out of the bounds, I think, sometimes. But I think the fishermen who are here, the ones who are struggling and fighting in that small business category that we're talking about here—there isn't one of them that doesn't understand the need to preserve the fisheries, to keep the stocks, and that isn't automatically a natural environmentalist. It just goes with the territory.

As we think about this, we have to reflect on the dynamics of our fishery, which is complicated—a lot of different kinds of fishing folks with a lot of different competing tensions and interests. I know we can do a better job, because as a matter of common sense, we can find the sweet spot between preservation and protection and the right to fish. And, you know, Barney and others are absolutely correct. I mean, there's no glory or rectitude in an automatic 10-year deal, depending on what else you do and how you manage.

So I look forward to this next meeting, and I'm going to ask Mr. Cunningham—I think it would be healthy if we could ask the members of the management council to come, all of them, from other states likewise, and I'm going to invite all of them. And I hope that

we can have—you know, it's not a speechifying event, but a real discussion of how we're going to break through here and make some choices.

And this delegation, I know, is united in its willingness to fight with the Commerce Department, with NOAA, with NMFS, with whoever it is that we need to in order to leverage common sense. We all understand our obligations to check the fishery, but we also just want to make sure we're basing choices on good science, good judgment, good input, good common sense.

I would remind everybody here some of the biggest challenges that we face are not just—are not the overfishing challenge, but the pollution/acidification challenge. Nobody here should underestimate it. The levels of heavy metals that are showing up in our fish is really alarming.

Professor, you're nodding your head. And the danger of acidification to spawning grounds, to crustaceans is gigantic, and it's already having an impact. So everybody here needs to recommit to efforts to deal with the climate change challenge that we're facing, and it is real with respect to our fisheries, enormously important.

I don't know if anybody else wants to make a last-minute wrap-up comment.

Senator Begich?

Senator BEGICH. Mr. Chairman, thank you very much. And I just want to—I like—when I do meetings and participate in meetings like this, I will tell you a couple of things I want to do is to take away, as Chair of the Oceans Committee, a couple of things I heard that we need to make sure occur from the first panel and maybe the second panel.

One from NOAA, we've asked for a report on their communication types to fishermen, what they're going to do, how they do it. The personnel issue, we will follow up, and if it's a required closed-door meeting, we will do that. The fisheries management process recommendations—we've asked NOAA to give us a detail of exactly how they're going to implement those and what the process will be, or what ones they're not going to implement. The rollover issue—you've heard the comments.

The 10-year issue is interesting because I was just handed something. There are four incidents here that exceed the 10-year, up to 41 years. So we have to look at why that is, what can we do to improve that so it's not just an arbitrary number that some have mentioned here. And I guess I would extract again, as much as I can, because I'm biased, of course, from Alaska, that we think we do all these things right up there. But maybe there are some other things we can extract out of that and share some more with the New England experience.

But thank you, Senator Kerry, for holding this meeting. Thank you for the invitation to attend. It has been enlightening to me, and I will do whatever I can to assist in ensuring that as time goes on that all the fisheries, no matter what the stocks are, are sustainable. And the last thing I'll mention is the other piece is a budgetary item from NOAA on how do we ensure annual stock assessments. In order to do the assessments—may they be—I'll use the word, annual, but it may be a variation—but to make sure they

are consistent and ongoing so you have a good way to manage. And I'll leave it at that.

Senator KERRY. Yes.

Mr. FRANK. Senator, I'll pick up from there, and I—this is a pretty—actually, in part to our colleagues here in state government in Massachusetts—SMAST is well represented here by Mr. Cadrin and Mr. Rothschild. The Federal people acknowledge their good work. I have to say that I'm very proud—when we were still allowed to earmark, I will confess that SMAST was very high on my list of earmarks, and I think that that was helpful.

I hope that the members of the legislature—and a lot of this is Federal, and I agree with Mr. Diodati that they shouldn't be bouncing this back to us. But the state, the administration, and the legislature can help us by fully funding SMAST, because we need to have science. We need good science to fight what we think is not good science, and that means adequate funding for SMAST. So I would put in that plea and acknowledge that those of us with a Massachusetts base have that responsibility.

Senator KERRY. Folks, on that note, we thank all of you for coming. We look forward to this next meeting. We'll get back to you, as I said. Please—we'll put a pad over here. I want you to sign up on the pad—e-mails, telephones. We stand adjourned.

[Whereupon, at 11:43 a.m., the hearing was adjourned.]

A P P E N D I X

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. MARK BEGICH TO
HON. JANE LUBCHENCO, PH.D.

Question. The Food and Drug Administration is currently considering approval of the first genetically engineered animal for human consumption, a transgenic Atlantic salmon created by AquaBounty Technologies. In the past, the escapement of non-genetically engineered farmed salmon and their contamination of wild salmon stocks has caused significant ecological and economic harm. Therefore, the prospect of the mass production of genetically engineered fish has raised alarm among the fishing industry, policymakers, and environmental groups, who are concerned about the potentially greater risks associated with the escapement of genetically engineered fish. Have the environmental and economic risks of the escapement of genetically engineered salmon or other marine fish been properly assessed? What are these risks?

Answer. The U.S. Food and Drug Administration (FDA) has performed a comprehensive assessment of the environmental risks that could arise from the production of AquaAdvantage Salmon®. This assessment has included consideration of the potential environmental risks of AquaAdvantage Salmon® under the following specific conditions of use: production of eyed eggs in Canada, shipment of eggs to Panama, grow-out of functionally sterile fish in Panama, processing of fish in Panama, and shipment of food to the United States. As part of the agency's evaluation of AquaBounty's application for approval of AquaAdvantage Salmon® under those conditions of use, FDA has reviewed materials submitted to FDA by AquaBounty, including an Environmental Assessment (EA) prepared by the firm.

FDA has been collaborating with other government agencies with expertise on issues associated with genetically engineered fish since 2002. During the course of its review under the Federal Food, Drug, and Cosmetic Act and the National Environmental Policy Act, on August 5, 2009, FDA sent a letter inviting NOAA Fisheries to consult with FDA regarding environmental issues related to AquaAdvantage Salmon®. A NOAA Fisheries Aquatic Animal Health Expert, along with FDA's aquaculture and environmental-risk experts, visited AquaBounty's grow-out facility in Panama on November 10–12, 2009. This site visit by FDA staff and NOAA Fisheries was conducted primarily to verify that the conditions of rearing and containment at the grow-out facility were as described in the materials submitted to FDA by AquaBounty, and to evaluate any other factors which could influence the potential for escape.

The FDA also provided NOAA Fisheries a packet of reports including a draft EA prepared by FDA. NOAA Fisheries agreed to continue to work with FDA in providing technical guidance on FDA's draft Environmental Assessment. In addition to the draft Environmental Assessment and supporting documents, FDA also submitted its determination that the approval of the application for AquaAdvantage Salmon® will have no effect on the Gulf of Maine distinct population segment of Atlantic salmon listed under the Endangered Species Act of 1973 (ESA). Because NOAA Fisheries does not review no effect determinations, that letter fulfilled FDA's obligation under section 7 of the ESA.

It is important to note that if FDA were to approve AquaBounty's application for AquaAdvantage Salmon®, these fish would be allowed to be produced and raised only under the conditions proposed in the application—including the specified locations of AquaBounty's facilities, which are limited to highly contained inland tanks, not net pens in the ocean. If, after approval, AquaBounty wanted to change the conditions of use in the application—for example, to add a new grow-out facility—a supplemental application would be required, which would, in most cases, trigger a new environmental assessment.

In September 2010, the FDA convened a Veterinary Medicine Advisory Committee to review science-based issues associated with AquaBounty's application. In advance of that meeting, FDA publicly released its review of AquaBounty's EA, as well as AquaBounty's EA itself, on August 25, 2010. FDA stated that there was substantial, reliable information available in AquaBounty's EA to conclude that AquaAdvantage

Salmon® are not expected to have a significant impact on the quality of the human environment.

Hon. JOHN F. KERRY,
United States Senator,
Boston, MA.

Dear Senator Kerry,

Enclosed please find the testimony of Mr. Herbert Crooks of 26 Union Street, Newburyport, Massachusetts concerning problems he has encountered with the Federal Government in regards to scallop fishing. Mr. Crooks was unable to attend the Commerce Committee's field hearing at the State House on September 28th and asked for my office to submit comments on his behalf.

Thank you for your prompt attention to this matter. If you have any questions, please feel free to contact my office directly.

Regards,

STEVEN A. BADDOUR,
State Senator,
First Essex District.

TESTIMONY OF HERBERT CROOKS

October 2, 2011

To whom it may concern:

I have a twenty six foot boat, with this boat I jigged for ground fish (cod-pollack) in the Gulf of Maine for a number of years. When I reached retirement age I converted my boat so I could fish for scallops, at the time I had a four hundred pound (per day) permit. My scallop dredge was only four and a half feet wide. (the N.M.F.S. considers a 10 Ft. dredge small) N.M.F.S. decided all scallopers would be monitored. (There is a monthly charge) In my case I could give up the four hundred lb. permit and drop down to forty lbs. a day. This I did because with my small dredge I would *never* catch 400 lbs in a day.

Two years later they told me I would have to be monitored or lose my 40 lb. permit. I gave up. All I wanted to do is retire and do a little scallop fishing, nothing big, catch a few, pay my fuel, have a few to eat. The N.M.F.S. ruined my plans for retirement. I'm sixty 9 years old, I'm not a big deal fisherman. The cost to convert to scallops has not been met. I'm hoping you can help me. I would like to have my 40 lbs a day permit back if possible. My health has not been good, shoulder surgery 2010, hip replacement surgery Oct. 6th, 2011. I just want to be able to catch a few scallops without being monitored.

Thanks,

HERBERT CROOKS.

P.S. I know this doesn't mean much in the "big picture" but, it means a lot to me. Again I thank you for your time.

PREPARED STATEMENT OF PEW ENVIRONMENT GROUP
AND CONSERVATIONAL LAW FOUNDATION

Chairman Kerry and members of the Committee:

Pew Environment Group and Conservation Law Foundation submit this written statement for the record in today's hearing of the U.S. Senate Committee on Commerce, Science and Transportation. The Pew Environment Group, the conservation arm of The Pew Charitable Trusts, works throughout the world to foster a better understanding of environmental problems through research and to promote sound conservation policy. Conservation Law Foundation (CLF) is a New England-based conservation organization that works to promote a thriving New England through developing and implementing pragmatic, innovative solutions to the region's most challenging environmental problems. The headquarters office for the Pew Environment Group is in Washington, D.C. with regional offices in Boston. The headquarters office of CLF is in Boston, MA. CLF also has state offices in Rhode Island, New Hampshire, Vermont, and Maine.

The purpose of this hearing is to examine the first year of implementation of Amendment 16 to the Northeast Multispecies (Groundfish) Fishery Management Plan, with a specific focus on the sectors program established by Amendment 16,

including its social and economic impacts. The Committee also seeks advice on constructive steps forward for improving Amendment 16's outcomes. Both the Pew Environment Group and CLF have actively engaged in ending overfishing and developing a sustainable, thriving fishing economy in New England for more than fifteen years. We appreciate the opportunity to provide this testimony to the Committee to share our perspectives on these critical and timely issues.

The following testimony comprises four sections: a summary; a brief history of groundfish management leading up to Amendment 16; the New England Fishery Management Council's objectives in developing and adopting Amendment 16 and the early outcomes of Amendment 16 based on the limited data set currently available from the first fishing year; and our recommendations on critical actions that need to be taken now.

I. Summary

Amendment 16 has been in effect for 17 months. The amendment was the result of a three-year public process and was overwhelmingly approved by the New England Fishery Management Council. Contrary to many predictions and in contrast with the estimated \$15.4 million in losses that were predicted if the 2010 fishing year took place under the existing "Days-At-Sea" management approach alone,¹ gross revenues for the groundfish fleet in the 2010 fishing year for all species landed—\$297.7 million—were \$26.6 million more than gross revenues in the 2009 fishing year and only \$500,000 lower than the banner 2007 fishing year.² Groundfish permit sales, an important indicator of consolidation at an organization level, were extremely low. *These outcomes show a healthy, adaptive fleet* that has diversified to target multiple species beyond groundfish, particularly skates and monkfish, and that has begun to take advantage of the added flexibility that the sector system in New England provides even in the challenging start-up year. As annual catch limits available to fishermen increase in the 2011 and 2012 fishing years, an outcome that directly reflects the success of the New England Council's current management decisions,³ the economic picture in the New England groundfish fleet should continue to improve, building on these early Amendment 16 successes. There remain important issues with respect to understanding net revenues across vessel classes, the loss of crew positions, the failure of the allocation formula to capture the 2007–2009 fishing years, concerns about sector transparency and potential monopoly practices, improving the ability to raise annual catch limits on rebuilding stocks in a timely manner, and consolidation. These issues are already being addressed in the appropriate venue—the New England Council. *Amendment 16 is an important step in the right direction for New England and New England's fishermen.* It should be supported in Washington, D.C., and efforts to improve the system should be spearheaded in New England as intended by Congress.

II. The Amendment 16 Context

Amendment 16 was not written on a blank slate. Fishermen, conservationists, politicians, coastal municipalities, scientists, and fishery managers in New England have struggled with the multiple challenges of achieving the laudable fishery management goals of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) since that law first went into effect in December 1976. What followed MSA enactment was a series of management actions later called "an enormous, immensely complicated intervention."⁴

Indeed, management chaos was the rule with New England groundfish, both in the years leading up to the passage of the MSA, when international fishing factory ships were anchored on Georges Bank, and in the years immediately following passage, when the offshore fishery was domesticated under U.S. law. Growing frustration with the "hard quota" groundfish management rules that were in place in New England after passage of the MSA led New England managers to introduce a system of "indirect" controls to control fishing mortality, such as limiting the numbers of days fishermen could be at sea (the days-at-sea, or DAS, program), changing mesh

¹ Amendment 16 FEIS, Table 255. The Days-At-Sea (DAS) program was the indirect control management system that was in place before the sector/hard quota program was added to it as an option in Amendment 16.

² These calculations are from the data and analysis in the NMFS Report on the 2010 Fishing Year. They assume that the NMFS Report presented the revenue data in constant dollars. If the report reported the revenue data in nominal numbers, the analysis would show lower results for the 2010 fishing year.

³ Additional quota over the 2010 fishing year limits are available in many species in the current 2011 fishing year and significant increases in quota for all but five stocks are projected to be available in the 2012 fishing year.

⁴ Margaret Dewar, *Industry in Trouble*, (1983).

sizes and other attributes of fishing gears, closing areas where fish were aggregating, and setting low “trip limits” for landing some stocks.⁵

The U.S. domestication of groundfishing off New England’s coast post-MSA was also marked by a Congressional decision to grow the U.S. groundfish fleet by heavily subsidizing capital investments in a fleet of offshore boats through Federal loan, guarantee, and tax programs. No regard was paid at the time to how much fishing power a New England groundfish fleet could sustainably exert on the groundfish stocks, either in the short or long term. This regional capacity bubble that Congress was subsidizing was coupled with a policy of open access to the fishery for anyone with a boat,⁶ technological improvements that resulted in a rapid increase in the fishing power of each boat in the 1980s and 1990s, poor assessment data that was often 4 years out of date by the time managers acted on it, and weak management by the New England Council and the National Marine Fisheries Service. These factors inevitably led to this century’s second major collapse of New England’s groundfish, this time accomplished by an overcapitalized, undermanaged U.S. fleet. Between 1994 and 1995, cod and haddock populations plummeted to the lowest estimates ever recorded.

The next period of groundfish management in New England, from 1995 to the present time, reflects a different pattern of “enormous, immensely complicated intervention,” characterized by multiple, successful lawsuits brought by conservation groups, two major amendments to the Magnuson-Stevens Act,⁷ and multiple revisions to the Northeast Multispecies Groundfish Plan⁸. All these actions focused on the persistent failure to end and prevent overfishing in the Nation’s fisheries more than 20 years after Congress first established that important national objective. Amendment 16 emerged out of this contentious and costly history and importantly reflected a commitment by the New England Council to fully meet its legal and policy objectives to prevent overfishing and produce healthy, thriving fisheries in New England.

The Council began to work formally on Amendment 16 on November 6, 2006, roughly at the same time that the 108th Congress was in the process of overwhelmingly approving the Magnuson-Stevens Reauthorization Act.⁹ The New England Council had already made two decisions that served as major drivers of Amendment 16: first, that groundfish management would shift back to a hard quota, direct control approach and, second, that the New England sector management pilot program put in place in 2004 should be expanded as an option to all fishermen.¹⁰ Leadership at the Council publicly signaled their intention to put the fishery under hard quotas during the Amendment 13 approval process, well before the accountability provisions of the 2007 Magnuson-Stevens Reauthorization Act made hard quotas a virtual requirement of any fishery management plan. Moreover, the Council had already launched a sector management/hard quota pilot program in Amendment 13 with the intention of learning from that experience.

Notwithstanding efforts by some to rewrite this history to their own narrow purposes, the New England sector-based management program was designed and implemented first by the New England Council in the fall of 2003, almost 7 years before the 2010 fishing year started under Amendment 16 and 6 years before a draft NOAA Catch Share Policy was circulated for public comment in December 2009. The first groundfish sectors with hard quotas were proposed by smaller-scale, coastal boat operators from eastern Cape Cod, who were convinced that their future access to the groundfish would be eliminated by the Days-At-Sea management approach in effect at the time. That program put these boats in direct competition with the larger and more mobile trip boats for a limited amount of groundfish, a competition they knew they could not win. In return for accepting hard quotas on their catch,

⁵ Trip limits limited the amount of a particular fish species that could be landed at the dock, but this control did not limit the amount of that species that could be caught at sea. The trip-limit control practice produced significant and widespread discarding of dead or mortally injured fish that were caught at sea but could not be landed.

⁶ The fishery remained open to all entrants until 1995.

⁷ The Sustainable Fisheries Act, Pub. L. No. 104-297 (1996) and the Magnuson-Stevens Fishery Management Act Reauthorization Act, Pub. L. 109-479 (2007).

⁸ In addition to the 15 amendments to New England’s groundfish management plan that preceded Amendment 16, there have been more than 45 less-comprehensive framework adjustments to the plan. With one or two non-controversial exceptions, all of these actions were taken on the authority of the New England Fishery Management Council.

⁹ The legislation passed the Senate on unanimous consent and passed the House of Representatives under suspension of the rules without a record vote.

¹⁰ The Council was also locked into making its “balloon payment” on the overfishing it had allowed in the early years of the rebuilding programs for a number of the stocks. There was general awareness that Amendment 16 could require major catch reductions because of the flexibility that New England had already taken advantage of under Amendment 13.

these Cape fishermen were given both protection in terms of having a set amount of quota they could catch over the year and some flexibility in terms of how they could catch that quota.

This 2003 Council decision, coupled with the positive experience that the Cape fishermen had in their pilot sectors during the initial years, evolved into the more expansive sector program the New England Council implemented in Amendment 16. *Quota-based sector management is a New England idea that was conceived and implemented first in Massachusetts by Massachusetts fishermen.*

III. The Council's Amendment 16 Objectives

The New England Council's major management goals for Amendment 16 were relatively straightforward, albeit ambitious:

1. Approve a groundfish management plan that could be in place by May 1, 2010 that met the Council's objective of creating a hard quota program and that also met the accountability and annual catch limit requirements of the Magnuson-Stevens Reauthorization Act to end and prevent overfishing.
2. Adjust all fishing catch limits so that the rebuilding dates set by the Council in Amendment 13 would be met based on current stock assessments; in several cases this required dramatic cutbacks from the 2009 fishing year mortality rates.
3. Make the sector management/hard quota approach widely available to groundfish fishermen throughout the region on a voluntary basis so that the operational flexibility that was available to Cape Cod fishermen under the pilot hard quota/sector approach would be available to others to reduce the expected social and economic impacts of the required quota reductions.
4. Reduce the mortality allowed by indirect control measures in the default program for fishermen not in sectors—the DAS program—so that estimated fishing mortality goals would also be met in this so-called “common pool” fishery through overall catch limits.

The New England Council approved Amendment 16 by a vote of 14–1–1 after more than 3 years of intense public debate, with positive votes from all Massachusetts representatives on the Council. Amendment 16 went into effect on May 1, 2010 with approximately 95 percent of the active groundfishermen¹¹ ultimately electing to enter one of the multiple sectors that formed under the auspices of Amendment 16. Amendment 16 was to a great extent the first groundfish management plan since 1976 that could arguably be said to be in full compliance with the MSA's legal requirements.

Notwithstanding the New England Council's authorship and strong endorsement of the plan, the predictions of social and economic chaos that seem inevitable with every management change in New England fisheries resurfaced again for Amendment 16, primarily from some in Massachusetts and New Hampshire. These dire predictions as well as the Council's objectives can now begin to be held up to the light of one full year of fishing under Amendment 16.

IV. Amendment 16 and the 2010 Fishing Year

Initially, we want to make four observations. First, fisheries management produces “winners” and “losers” in the fishing community, as management actions do in any industry. Amendment 16 is no exception. While we believe the data so far leads to a conclusion that Amendment 16 was effective in accomplishing its larger purposes while minimizing a number of the impacts that managers identified during the plan development process, the Pew Environment Group and CLF recognize that some fishermen have suffered significant and potentially disproportionate losses as a result of Amendment 16. We share the obvious concern and commitment of members of this Committee that these negative outcomes from Amendment 16 should be documented, quantified, and taken into account in future management actions.

Second, it is premature to draw firm conclusions from the preliminary data and analysis. Permit numbers, vessel activity shifts, shifts in gear types or active vessel sizes, landing port shifts and similar early results may or may not reflect real phenomena and may or may not be directly connected to Amendment 16. Current analyses are limited: they do not accurately reflect changes in economic activity at an ownership level; they do not reflect net revenues; they may reflect other regulatory

¹¹The New England groundfish fishery has always had many more issued permits than active fishermen, an artifact of the open access period. Historically, the number of groundfish permits has always been more than double the number of actual, active fishermen on the water. Claims that only half the permitted vessels were actively fishing is hardly an outcome of Amendment 16.

drivers such as the ability to land lobsters from a groundfish boat in some states but not in others; they may reflect other relevant state-to-state regulatory or taxation differences; data on crew employment changes have always been notoriously difficult to collect and interpret; the 2010 fishing year was a start-up year for an entirely new management approach with a steep learning curve for fishermen and sector managers alike; and finally, there are a number of future costs associated with the observer program that are temporarily being subsidized by the Federal Government and are not currently reflected in fleet cost structure.

Third, critical analytical information is not available to the public or, in some cases, this Committee. Legal restraints imposed by Congress on data releases to protect proprietary economic fishing data, coupled with the agency's conservative approach to releasing this confidential data, prevent the public from understanding a number of economic or social impacts, particularly at the level of a small port or individual fisherman. Another set of cost data—the direct or indirect internal costs that individual sectors may be imposing on their members through membership fees, operating charges, or other indirect internal “regulatory” costs—are not available to the agency, the Council, or this Committee based on our understanding. These costs could be very significant to the success or failure of an individual operation.

Fourth, the 2010 fishing year (FY) cannot be analyzed in isolation. We anticipate that the gross 2010 FY groundfish revenues will grow over time for two reasons. First, because the Council was successful in virtually eliminating overfishing in the fishery, fish stocks continue to rebound in most cases. Accordingly, the specifications for the current 2011 FY and the 2012 FY are increasing the allowable catch. In the 2011 FY, the quota for many species has already been increased; for the 2012 FY (which starts May 1, 2012), the science recommendations before the Council for approval this fall in Framework 47 show substantial increases in quota over the 2010 FY catch for additional species, including a number of the flounder species that were in significant trouble previously. The total recommended allowable biological catch, which still must be reduced by the Council to account for management uncertainties, shows a total Acceptable Biological Catch (ABC) of approximately 98,800 metric tons available in the 2012 FY. The total 2010 groundfish catch was approximately 58,900 metric tons.

The second reason we expect continued improvements in gross revenues is that we anticipate that sectors will continue to improve their ability to manage their member's fishing activities in real time to target their sector members toward areas with a high abundance of available species like haddock, redfish, and Pollock, and away from areas with relatively higher concentrations of species that have more limited quotas. In addition, the New England Council as part of its habitat protection work is looking at modifying some currently closed areas to allow new entry into areas with high haddock concentrations. Although it is too early in the process to draw any conclusions, some closed area modifications may make sense and could be in place by the 2012 FY.

Turning then to the social and economics outcomes of Amendment 16 from a macro-level, the Amendment 16 outcomes look positive based on currently available information. Most active fishermen took advantage of the sector opportunity (some 98 percent) and the early information is that there may have been overfishing on only one sub-component of one stock—an important first for New England groundfishermen. For the entire fleet in the 2010 FY, gross all-species revenues were \$297.7 million on landings of 238 million pounds; groundfish revenues were \$83.3 million on 58.5 million pounds.¹² In 2007, a very strong revenue year in recent history, gross revenues were \$298.2 million on 259.5 million pounds of fish, of which groundfish were \$89 million on 64 million pounds of fish. *Year-to-year, the fleet grossed \$26.6 million more in the 2010 FY than in the 2009 FY on 2.4 million fewer pounds of fish.*

The Massachusetts fleet and large ports were the primary beneficiaries of Amendment 16, recording one of the strongest years in memory with \$12 million more in revenues than 2009 (+7.3 percent) and even \$6 million more than the strong 2007 fishing year. New Bedford landed roughly \$10.4 million of that (+12.2 percent from 2009). Boston also did remarkably well with roughly a \$4 million increase over 2009: a 25.5 percent increase in gross revenues over the prior year.

Many factors produced and maintained high prices over the course of the 2010 FY, but it is our view that Amendment 16 was an important one. We heard no reports this past year of the random market gluts that have reduced prices to the groundfish boats in New England in the past. The fleet seems to have caught fewer fish on fewer trips and made more money. Our view is that the fleet fished smarter

¹² See caution at footnote 2.

in the 2010 FY by timing their harvests to times of the highest prices, by increasing cooperation within sectors, and by diversifying their species catch. Amendment 16 gave the active fishermen in the sectors the flexibility that allowed them to do that without jeopardy of overfishing, excessive regulation, or early closures.

Active New England fishermen realized \$26.6 million more in gross revenues in the 2010 FY than the 2009 FY. The NMFS 2010 FY Report concludes that “[a]verage all-species [gross] revenue per vessel during the fishing year 2010 was greater than that in any of the three prior fishing years across all vessel size categories.”¹³ That is a significant positive outcome after the first year of Amendment 16.

Perhaps even more significantly, some classes of vessels in the fleet appear to have landed these fish with only one-half the number of fishing trips that they had previously used. Fewer trips result in lower fuel and other variable costs and allowed some fishermen to spend more time in other fisheries without jeopardizing their catch limits. Each trip, therefore, was far more efficient and the catch-per-unit-effort (CPUE) figure for the fleet, a widely recognized statistic used to measure the health of a fishery, is likely to rise significantly in the 2010 fishing year.

On the flip side, the complete cost picture of Amendment 16 remains unknown at this point. Lower fuel costs and other variable operating costs, as well as the new revenues some fishermen realized by leasing their fishing privileges to others in their sectors, have to be offset against the new one-time and annual costs of joining and belonging to a sector, as well as costs associated with leasing fishing privileges from other fishermen in their sector.¹⁴ Anecdotally, it appears that some of the smaller, day boat operations have been disproportionately impacted by new costs and limited allocations, although it is impossible for us to attempt to quantify or understand the potential causes for this situation at this time. Variable sector cost structures may contribute significantly to this issue: some sectors seem to charge relatively modest entry charges and operating charges; others have significant up-front membership payments and other charges on fish landed through the sector. These costs and other sector practices could add considerable expenses to a sector member’s operations that may not be proportionate to a vessel’s size or allocation. As noted above, these costs are not controlled by the government and, to our knowledge, there is little information available that allows these costs to be comprehensively examined.¹⁵

In terms of the number of active boats and the claims by some that Amendment 16 has produced “massive consolidation,” there is only anecdotal information at this point to support those claims. While we remain concerned that the New England Council did not put numerical limits on the fishery that would prevent unintended consolidation in Amendment 16, that task is now underway under Amendment 18. Moreover, by its own specific terms and the stated intent of the Council, nothing in Amendment 16 is irreversible if the Council concludes that consolidation caps, new allocation formulas, or other controls are necessary to meet the national standards under the Magnuson-Stevens Act or the policy objectives of the New England Council. The Council has also passed a March 2011 control date on the fishery that puts the world on notice that fishing history developed after that date may not be considered by the Council in the future.

Reviewing the available data from the 2010 FY, the number of active groundfish boats decreased under Amendment 16 at a slightly higher rate than the decreases recorded in the prior 3 years. There are a number of possible explanations for this result, and perhaps all of these mechanisms were operating together. First, individuals in sectors who owned multiple groundfish permits on separate boats were allowed to consolidate their permit histories onto one boat if their sector rules permitted that. There is little question that a number of the larger operations located in the larger ports like New Bedford and Gloucester took advantage of this new ability to re-configure their operational profile down to one or two boats. Such economic efficiency is encouraged by National Standard 5 (“consider efficiency in the utilization of fisheries resources”) in the MSA and not necessarily a negative outcome on its own.

¹³NMFS 2010FY Report at 9 (emphasis in original).

¹⁴This intra-fisherman allocation leasing is not new with Amendment 16; fishermen already could lease days-at-sea before Amendment 16. Amendment 16 shifted this program to “pounds of fish” instead of “days-at-sea” and increased the flexibility available to sector fishermen using this existing tool.

¹⁵See the Port Clyde Community Groundfish Sector operating plan for example. <http://www.nero.noaa.gov/sfd/sectordocs/PortClydeFY10OpsPlan.pdf>. The annual membership fees and poundage fees are referenced but no amounts are set or identified. See Section 2.06.

Second, under the older DAS system, the active groundfishermen tended to fish as hard as they could during the days they were allowed to fish, and many tended to frontload fishing to the earlier part of the season to avoid late season changes that could be implemented by NMFS if it looked like there were going to be too many landings. This behavior was unsafe, produced market supply gluts with low prices, and often resulted in unpredictable early closures or additional regulations at the end of a fishing year. Under the Amendment 16 system, this has all changed. A fisherman can fish when the weather, prices, his health, and the availability of crew, and other factors are optimal for him or her. Or not, as there is no penalty for a fisherman who doesn't fish: it can be leased to someone else in the sector for an arm's-length fee. A number of fishermen undoubtedly took advantage of this new leasing opportunity for a variety of reasons: health, age, taking advantage of other non-groundfish fishing opportunities, and other personal issues. These vessels might choose to become "inactive" during the 2010 FY while still retaining the right to become active again in the future if circumstances change. It is our understanding that the numbers of sales of groundfish permits with fishing history dropped significantly during the 2010 FY over prior years, suggesting that permanent shifts in fishing activities may not have occurred.

Third, continued consolidation was one of the Council's objectives with Amendment 16. The New England Council had been aware for years that the groundfish fleet's fishing power significantly surpassed the ability of fish stocks to provide fish. They have been actively approving management plan amendments that reduced the fishing power of the New England fleet for some time. Amendment 16 was a continuation of that policy. Congress as well had recognized this overcapacity problem in New England and had earlier authorized tens of millions of Federal dollars to be spent to reduce fleet size through Federal buy-out programs in New England.

For decades, the fleet's groundfish fishing power has been significantly greater than made economic or environmental sense, but this capacity bubble was always subsidized by overfishing and target quota overruns. The high number of permitted but inactive boats in the fleet during the prior DAS program is ample testimony to that overcapacity. The boats associated with these inactive permits had no regulatory impediment to fishing under the DAS program, yet the owners still chose not to fish those permits.

More importantly, the current New England groundfish fleet is widely acknowledged as having too much fishing power even with fully rebuilt fish stocks. The economic inefficiency associated with that overcapacity is not consistent with a sustainable fishery, particularly with respect to the larger, commercial operations. A significant amount of the consolidation experienced in Amendment 16 will undoubtedly reflect a number of fishing operations moving their fish allocation to their more economically efficient boats.

In point of fact, the old DAS program was far more brutal with respect to its consolidation effects than Amendment 16, falling most heavily on the coastal day boats that lacked the mobility of the larger fishing vessels to re-locate quickly to where the fish were congregating or to fish safely offshore year-round. The larger boats fished heavily both offshore and near shore, and the DAS program (which charged permit holders for steaming time when a boat wasn't fishing) ensured that the large boats fished inshore whenever they could to minimize the charges against the permit. This behavior both drove coastal boats into other fisheries and, by overharvesting inshore stocks, reduced the catch-per-unit effort and fishing history for these operations even when they were able to fish.

In order to put Amendment 16's first year performance in context, a longer time period is necessary because a great deal of consolidation of permits had already occurred by the start of the 2007 FY. Between 1996 and 2007, the number of active groundfish boats fell 42 percent from 1450 to about 820, the number of full-time groundfish fishermen fell by about 30 percent, and part-time groundfishermen declined by 50 percent.¹⁶ Over that same period, overall groundfish landings fell by about 10 percent. The NMFS 2010 FY Report only analyzes data between the 2007 FY and the 2010 FY.

With respect to the distribution of fishing privileges across the groundfish fleet, the data for the 2010 FY indicates that the top 20 percent of the multispecies permitted vessels accounted for 65.1 percent of the fleet's gross revenues for all species landed by those vessels and 80 percent of the fleet's groundfish stock gross revenues. In 2007, the comparable numbers for the top 20 percent were 61 percent for all species and 67 percent for groundfish alone. In 2010, the bottom 40 percent of the groundfish vessels accounted for 8.9 percent of all species gross revenues and

¹⁶ www.caploggroup.com/publications/html: Memorandum re. Current Level of Consolidation of the Northwest Multispecies (Groundfish) Fishery at 3 (May 2010).

1.4 percent of groundfish stock gross revenues and 10 percent and 5.3 percent respectively in 2007.

Year-to-year between the 2009 and the 2010 fishing years, the top 20 percent of vessels increased their all-species revenue by 4.7 percent and their gross groundfish revenues by 11.1 percent. The 2009–2010 year-to-year gross revenue change for the bottom 40 percent of the groundfish fleet was –1.6 percent change for all species and a –1.9 percent change for groundfish revenues. Thus, within this short analytical time period, there are some trends that indicate some consolidation in total revenues and a more significant increase in groundfish revenues in the largest 20 percent of the fleet. Most of this shift appears to have occurred by relative changes in the top 60 percent of the groundfish fleet, not the bottom 40 percent.

With respect to the number of vessels that were earning revenues in the fishery in the 2010 FY, there were 28 percent fewer vessels earning the top 50 percent of all species gross revenues in 2010 than 2007 (207 from 249), but only a 9.7 percent change from 2009 to 2010 in this category. In the bottom 50 percent of active boats, all-species revenues decreased 18.9 percent from the 2007 FY to 2010 FY but only 10.2 percent of that decline occurred after Amendment 16. Notably, none of these changes account for the changes at an *ownership* level, as opposed to a *permit* level. That information is obviously important to understand but will not be available until later this fall.

While some of these fishing privileges distributional ratios may seem startling to someone new to fisheries, this ratio is quite consistent with patterns in this fishery in the past and in other developed fisheries around the world, which traditionally show 20 percent of the boats catching 80 percent of the fish in a particular fishery. As the Cap Log Group reported: “The Northeast Multispecies Fishery has approximately followed the 80–20 rule for over a decade, at least. From 1998–2007, the distribution of landings remaining fairly consistent with about 20 percent of the vessels harvesting around 80 percent of the groundfish. In contrast, about half the vessels landing more than one pound of groundfish caught under 5 percent of the total catch annually across the same period.”¹⁷

Amendment 16’s consolidation pressures and effects cannot be analyzed in isolation from either the trends that were already well in place in New England or from the Council’s explicit intentions or on the basis of anecdotal or partial information. And these outcomes should not be measured on the basis of a single year, a year that was widely characterized by an array of start-up challenges in the sectors. What can’t be answered quantitatively, and what is rarely, if ever, discussed by opponents of Amendment 16, is what the effects of the lower catch limits available in the 2010 FY would have been on the 98 percent of the fleet that went into sectors—day boats and trip boats alike—if the sector program had not been available to them

V. Recommendations to the Committee

The Committee seeks suggestions for constructive steps forward that improve Amendment 16’s outcomes. In that spirit, the Pew Environment Group and CLF offer the following thoughts.

Amendment 16 is an important step forward for groundfish management in New England and has a number of promising early results. It is not and cannot be the final answer; there is still critical work to be done. The following recommendations are not set forth in any particular priority and include items in which Congress may have a beneficial role and others where the New England Council should take the lead.

1. *Amendment 18*, which has been specifically designed to look at a range of social and economic and operational aspects of Amendment 16, including its consolidation and distributional effects, *should be high on the New England Council’s priority actions for the coming year*. It is of utmost importance that the Council balance the goals of National Standard 5 (improve efficiency) with National Standard 8 (minimize community impacts). Among the issues that PEG and CLF believe the New England Council has to analyze and respond to in Amendment 18 are:

- consolidation caps and stock control caps (percentage of a stock that can or should be controlled by one entity), both at an organizational level and at the sector level;
- disproportionate intra-state distributional effects, although these may well be completely due to factors that are extrinsic to Amendment 16;
- the social and economic impacts of the 1996–2006 allocation time period set out in Amendment 16, particularly with respect to the question of whether it has

¹⁷*Id.* at 4.

failed to capture increased landings of some segments of the fleet during the 2007–2009 fishing years; and

- sector rules and member charges, with an objective of establishing performance standards that ensure that entry and exit rules of sectors are equitable, transparent and reasonable, and that sectors do not operate in an anti-competitive or monopolistic manner within the fishery or act unreasonably to bar dissatisfied members from transferring to another sector. Sectors are now the principal way that fishermen have to access the groundfish fishery; regulators need more explicit oversight of their operations.

2. Congress should provide targeted *research and development funding for gear improvements and sector technology that will allow fishermen to catch higher percentages of target rebuilt fish populations* without negatively affecting rebuilding programs of overfished stocks. The New England Council is already exploring other approaches to increasing access to rebuilt stocks without interfering with the trajectory of the stocks that are still being rebuilt. Additional research funding directed toward gear technology and sector management improvements would continue to pay multiple dividends over time.¹⁸

3. *Increased funding for data collection (fisheries-dependent and independent data) and analysis* that could increase the accuracy of stock assessments and give New England fishermen the benefit of higher annual catch limits associated with rebuilding stocks on a more timely basis, as occurred with Atlantic sea scallops. Congressional budget lines for these areas remain a small fraction of what is needed and what could be used productively and profitably. There is a widespread sense that such Federal investments would be more than repaid through higher production in commercial fisheries, certainly in the long run but also in the short run for many species.¹⁹ Funding for research and development for new, more efficient approaches to and for data collection for stock estimation is also critical and could reduce long-term fishery costs and support regional research that could generate business opportunities for monitoring technologies around the world.²⁰

4. *Congress needs to recognize the critical importance of continued Federal financial support for the monitoring program* currently in place for the groundfishery. Funding for this monitoring program is currently scheduled to be shifted onto groundfishermen at the start of the May 1, 2012 fishing season, which is right around the corner. More time is necessary for New England to refine effective, lower-cost monitoring programs (including electronic monitoring programs currently at a proof-of-concept phase in the region) before the Federal Government curtails this monitoring support.

5. *Congress should continue to support and fund permit banks, revolving loan funds, and other innovative social programs*—including limits on such programs—as those programs are being developed in the region at a local or state level. These programs can be used to accomplish important social objectives, such as ensuring that there is a diversity of fishing operations in a state or creating a state-level “new entrants” program that would allow young people to gain experience and history in the groundfish fishery without having to mortgage their families and their futures by having to buy permits.

6. *Conflicts of interest and data confidentiality requirements continue to be significant issues in the region*, particularly with respect to public transparency but also for purposes of internal management analyses outside of NMFS. Given the fact that

¹⁸Congressional efforts to amend the Magnuson-Stevens Act to allow higher catch rates or overfishing on rebuilding fish populations like cod in order to achieve more of the available yield on haddock have failed to consider possible long-term impacts. Haddock is abundant today primarily because of two unusual and disproportionately large year classes of haddock. As those fish mature and are caught, the importance of rebuilding cod as rapidly as possible may become key to the profitability of future fisheries. A healthy ocean system has abundant populations of a mix of species. Such biodiversity of commercial species will become particularly critical as average sea temperatures rise and increased stresses are placed on fish species.

¹⁹The assessment science and data analysis at NMFS and NOAA can also be improved at existing funding levels. Much of that work is already underway and more opportunities to streamline, re-prioritize, and re-conceptualize fisheries analyses are being advanced within and without the agencies every day. As far as we are aware, U.S. fisheries science is already a match for any government system in the world.

²⁰As just one example, laboratories at Northeastern University and Massachusetts Institute of Technology have created an acoustical sensing approach that can quantify the population of Atlantic herring within 10,000 square kilometers of the device. The researchers compare their approach to “looking at a whole movie” as contrasted with current survey methods that they liken to looking at a single pixel on a screen. They have no funding to complete their work in the Gulf of Maine. Herring harvests, for example, could potentially be set at significantly different levels and managed in real-time if data collection to support that were available.

these activities occur with a public resource, Congress may want to revisit these issues in the next reauthorization to ensure that the national interests and the public's right to know are being served under the existing, highly-protective regime.

VI. Conclusion

Amendment 16 is the result of a three-year process; there are over 55,000 pages in the administrative record for the amendment. If there are any legal defects with Amendment 16, they will be identified and resolved by the First Circuit Court of Appeals, where the legal challenges of Amendment 16 by some of the commercial fishing interests are currently being processed for decision. With respect to the management policies underlying Amendment 16, those are the New England Fishery Management Council's policy decisions, including the shift to hard quotas and the decision to make hard-quota-based sectors available widely to the region's fishermen. These decisions were the product of extensive and sustained public debate and untold hours of analysis. Congress should be careful to harmonize its actions with the regional management decisions relating to this complex fishery. No one claims that Amendment 16 is perfect. We also acknowledge that Amendment 16 may well have impacted some of the region's best fishermen. However, for most fishermen, including all but one of the designated representatives of the fishing industry on the New England Council, Amendment 16 is working as designed. This system needs to be given a chance to show its promise.

On behalf of the Pew Environment Group and Conservation Law Foundation, we want to thank Chairman Kerry and the members of the Committee for this opportunity to provide a statement on this important subject.

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PREPARED STATEMENT OF MAGGIE RAYMOND ON BEHALF OF THE ASSOCIATED FISHERIES OF MAINE

Senator Kerry, members of the Committee, thank you for taking the time to read this statement by the Associated Fisheries of Maine on the subject of the current state of the Massachusetts groundfish industry.

Associated Fisheries of Maine is a trade association of fishing and fishing dependent businesses. Our membership includes harvesters and processors who land and process fish in the Commonwealth of Massachusetts. Our harvester members land over 19 million pounds of groundfish and monkfish annually in the ports of Gloucester, Boston, and New Bedford.

In the 2010 fishing year, New England fishermen and fisheries managers faced mandates of the Magnuson Stevens Fishery Conservation and Management Act to set annual catch limits and accountability measures, to immediately end overfishing, and to reduce fishing mortality by

- 50 percent on Georges Bank cod
- 46 percent on witch flounder
- 39 percent on Southern New England yellowtail
- 37 percent on Gulf of Maine cod, and
- 34 percent on Gulf of Maine yellowtail

Amendment 16 imposed the required reductions in fishing mortality, along with annual catch limits, with the result of low catch limits for all groundfish fishermen. These low catch limits have negatively impacted the ability of fishermen to achieve profitability in their harvesting businesses.

Additionally, overcapacity in the New England groundfish fleet has been a recognized problem for decades, has contributed to overfishing, and has challenged the efforts by fisheries managers to reduce fishing mortality as required by law. Fisheries managers have recognized the need for consolidation to address overcapacity and have made several attempts to encourage consolidation of the groundfish fleet, including a recent letter to the Secretary of Commerce communicating the need for a buyout.

Amendment 16 has dealt another economic blow to New England fishing and fishing dependent businesses. There is also evidence that Amendment 16 has ended

overfishing and dramatically reduced discards of valuable groundfish, achieving important objectives of the Magnuson Stevens Fishery Conservation and Management Act and the New England groundfish management plan.

In January 2011, the New England Fishery Management Council (Council) submitted Framework Adjustment 45 which, among other things, attempted to reverse the onerous requirement for the groundfish industry to pay for at-sea monitoring in 2012.

Unfortunately, NOAA disapproved this recommendation by the Council.

This week, again recognizing the significant financial burden of at-sea monitoring costs, the Council initiated a regulatory action to make changes to the requirement for the industry to pay for at-sea monitoring. We are not confident that this action can or will be approved before the industry is handed a monitoring bill that it cannot pay.

The Associated Fisheries of Maine appreciates the continued interest you and all of our

New England Senators have paid to the economic difficulties being experienced by fishermen. You have penned several letters to NOAA Assistant Administrator Schwaab expressing concerns about the significant cost of monitoring that the industry is expected to shoulder and the need for regulatory flexibility to allow fishermen to access healthy groundfish stocks. These are precisely the issues that require your continued advocacy on our behalf.

We urge you to focus your attention on finding solutions to these problems, especially by assuring that NOAA's budget includes the funding necessary to adequately monitor the groundfish management program.

