S. HRG. 106–1030

REAUTHORIZATION OF THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

HEARING

BEFORE THE

SUBCOMMITTEE ON OCEANS AND FISHERIES

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

JULY 29, 1999

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ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

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C O N T E N T S

WITNESSES

APPENDIX

REAUTHORIZATION OF THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

THURSDAY, JULY 29, 1999

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

The Subcommittee met, pursuant to notice, at 9:30 a.m., in room SR–253, Russell Senate Office Building, Hon. Olympia J. Snowe presiding.

Staff members assigned to this hearing: Sloan Rappoport, Republican Counsel; Stephanie Bailenson, Republican Professional Staff; and Margaret Spring, Democratic Senior Counsel.

OPENING STATEMENT OF HON. OLYMPIA J. SNOWE, U.S. SENATOR FROM MAINE

Senator SNOWE. Good morning. I am going to try to move this along, at least in the first few minutes, because we are going to have a series of three votes, starting at 9:30. So I will quickly go through my statement. Then if we can begin with the first witnesses and see how far we can go before I may have to leave.

First of all, I would like to welcome all the witnesses who will be testifying here today and others in attendance, on the issue of reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act. The most significant issue before the Oceans and Fisheries Subcommittee in this Congress will be the reauthorization of this Act, which is the principal Federal law governing marine fisheries management.

Today's hearing begins with what is sure to be an exhaustive review of the statute and the administration's implementation of it. It is my intention to hold field hearings in the various coastal regions of this country. They will provide us with the opportunity to discuss in great depth the specific regional concerns that have been raised. Today's hearing, therefore, will lay the foundation for these future discussions.

The last reauthorization of the Act was quite substantial. I would be remiss if I did not acknowledge the work of my colleagues during the last reauthorization. The Subcommittee was led through the last reauthorization by Senator Stevens, who chaired this Subcommittee, as well as Senator Kerry, who is the ranking minority member of this Subcommittee. Their tireless work significantly changed the way we manage fisheries.

Enactment of the Fishery Conservation and Management Act in 1976 began a new approach to Federal marine fishery management. It was a direct response to the depletion of the U.S. fishery resources by foreign vessels and secured U.S. jurisdiction and management authority over fisheries, out to 200 miles from our shores. The Magnuson-Stevens Act is administered by the National Marine Fisheries Service and the eight regional councils that manage fisheries in geographic areas through specific fishery management plans.

Their actions establish the rules under which the fishing industry operates. They determine harvest quota, season length, gear restrictions, and license limitation. That is why difficult management decisions must involve the people whose livelihood depends on the continued access to these resources. As such, it is critical that there be a balanced and fair apportionment of council seats so that all have a strong voice in management.

Today, we will hear testimony about breakdowns in the participatory process that have led to the adoption of less than adequate management measures. One of the overall goals of the Magnuson-Stevens Act is to provide a mechanism to determine the appropriate level of catch to maximize the benefit to the Nation, while still protecting the long-term sustainability of the fisheries. It is a balancing act among competing interests of commercial and recreational fishermen.

We will also hear about the need for participation of non-fishing interests when managing public resources.

The Sustainable Fisheries Act was enacted in 1996, and the provisions and requirements of the Act reflect significant changes to the goals and objectives of the Magnuson-Stevens Act. Proper implementation of these provisions is of great concern to many groups. Accordingly, there is considerable interest in the implementation activities of the regional councils, as well as the National Marine Fisheries Service.

The most substantial change in fishery management under the Sustainable Fisheries Act was the mandates to stop overfishing and restore overfished stocks. The councils were given a timetable to achieve these goals, and we will hear today the status of their actions.

Witnesses from around the country will be able to give firsthand reports about the level of success the councils have had in fulfilling this mandate. The councils and the National Marine Fisheries Service were also told to increase their emphasis on social benefits that might better preserve traditional fishermen. Because of the high level of overfishing, management measures will be required in a variety of fisheries. It is essential, therefore, that we remember to preserve the fishermen as well as the fish.

There have been numerous criticisms of NMFS and the councils for not taking adequate measures to address the financial hardships tough management will inevitably cause.

Today, we will be hearing from many fishermen, as well as representatives of fishing communities, of the impact that these management decisions have had on the fishing industry in total.

The Sustainable Fisheries Act also imposed a moratorium on the creation of new individual fishing quota management programs in

which a transferable percentage of the annual catch is held privately. Today's witnesses will offer recommendations about how to address such programs in the future.

The final paradigm shift incorporated in the Sustainable Fisheries Act that we will hear about today are the provisions to minimize bycatch and restore and protect fish habitat. Based on concerns that certain fish stocks had declined due to their loss of surrounding habitat, the Act established a national program to facilitate long-term protection of essential fish habitat. Many have argued that these provisions have not been properly implemented. We will be discussing this problem with our witnesses today.

During recent trips home to Maine, I have had the opportunity to discuss the reauthorization of this Act with fishermen and people who live in fishing communities. These hardworking men and women also have very specific concerns with the way the law is being implemented.

Let me conclude my remarks by saying that those most affected by this law believe that the Act is too rigid, that it is not being implemented properly by NMFS, and that contrary to its mandate, the best science is not being used in management. As we begin this reauthorization process, we should try to make sure that sustainable fishing and good management become the norm and not the exception. Clearly, this reauthorization will have major implications for the future of marine fisheries in the United States.

[The prepared statement of Senator Snowe follows:]

PREPARED STATEMENT OF HON. OLYMPIA J. SNOWE, U.S. SENATOR FROM MAINE

The hearing will come to order. Before we begin, I would like to welcome the witnesses, my colleagues, and others in attendance today.

Today's hearing will address the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act.

The most significant item before the Oceans and Fisheries Subcommittee in this Congress is the reauthorization of the Magnuson-Stevens Act, the principal Federal law governing marine fisheries management. With today's hearing, the Subcommittee begins what is sure to be an exhaustive review of this statute and the Administration's implementation of it.

It is my intention to hold field hearings in the various coastal regions of the country. These field hearings will provide us with the opportunity to discuss in great depth the specific regional concerns that have been raised. Today's hearing, therefore, will lay the foundation for these future discussions.

The last reauthorization of the Act was quite substantial. I would be remiss if I did not acknowledge the work of my colleagues during the last reauthorization. This Subcommittee was led through the last reauthorization by Senator Stevens and Senator Kerry. Their tireless work significantly changed the way we manage fisheries.

The enactment of the Fishery Conservation and Management Act in 1976 began a new approach to Federal marine fisheries management. The Act was a direct response to the depletion of U.S. fishery resources by foreign vessels. It secured U.S. jurisdiction and management authority over the fisheries out to 200 miles from our shores. Under the Act, foreign catch from the U.S. exclusive economic zone declined from about 3.8 billion pounds in 1977 to zero in 1992. The Act's intent was to provide long-term stability and sustainable fisheries, though today in mafiy areas we are again overcapitalized and the stocks face a crisis similar to that of the 1970's.

The Magnuson-Stevens Act is administered by the National Marine Fisheries Service and eight Regional Fishery Management Councils that manage the fisheries in their geographic areas through specific fishery management plans. Their actions establish the rules under which the fishing industry operates. They determine the harvest quotas, season length, gear restrictions, and license limitations.

This is where tough management decisions need to be made and must involve the people whose livelihood depends on the continued access to these resources. As such, it is critical that there be a balanced and fair apportionment of council seats so that all have a strong voice in management. Today, we will hear testimony about break-

downs in the participatory process that have led to the adoption of less than adequate management measures.

One of the overall goals of the Magnuson-Stevens Act is to provide a mechanism to determine the appropriate level of catch to maximize the benefit to the Nation while still protecting the long-term sustainability of the fisheries. It is a balancing act among competing interests of commercial and recreational fishermen. We will also hear about the need for participation of non-fishing interests when managing public resources.

There is no doubt that fisheries are very important to many states and the Nation as a whole. In 1997, commercial landings by U.S. fishermen were over 9.8 billion pounds of fish and shellfish, worth $3.5 billion. Further, the recreational fishing catch was 234 million pounds.

In my State of Maine, fishing is more than a job, it is a way of life. Up and down the Maine coast are communities with long and rich fishing heritages. When many people think of Maine, they think of lobsters—and get hungry.

But there is much more to Maine fishing than lobster. In fact, I'm very proud to say that in 1998, for the fifth year in a row, Maine has led the northeast with fishing revenues valued at $277.4 million.

Other regions of the country have a similar dependency on commercial fisheries, some are strong and robust, others have not fared as well—their fish stocks have declined and communities in those regions are feeling the economic impact. Throughout the reauthorization process we will be examining ways to again bring about healthy fisheries and healthy fishing communities.

The Sustainable Fisheries Act was enacted in 1996. The provisions and requirements of the Act reflect significant changes to the goals and objectives of the Magnuson-Stevens Act. Proper implementation of these provisions is of great concern to many different groups. Accordingly, there is considerable interest in the implementation activities of the regional councils and NMFS.

The most substantial change in fisheries management under the Sustainable Fisheries Act was the mandate to stop overfishing and restore overfished stocks. The councils were given a timetable to achieve this goal and we will hear today the status of their actions. Witnesses from around the country will be able to give first-hand reports about the level of success the councils have had in fulfilling this mandate.

The councils and NMFS were also told to increase their emphasis on social benefits that might better preserve traditional small fishermen. Because of the high level of overfishing, many tough management measures will be needed in a variety of fisheries.

It is important that we remember to preserve the fishermen as well as the fish.

There have been many criticisms of NMFS and the councils for not taking adequate measures to address the financial hardships tough management will inevitably cause. We will be hearing examples today of the impact on fishermen and fishing communities this has had.

The Sustainable Fisheries Act also imposed a moratorium on the creation of new individual fishing quota programs in which a transferable percentage of the annual catch that is held privately. We will be hearing today some suggestions about how to handle such programs in the future.

The final paradigm shift incorporated in the Sustainable Fisheries Act that we will hear about today are the provisions to minimize bycatch and restore and protect fish habitat. Based on concerns that certain fish stocks had declined due to loss of their surrounding habitat, the Act established a national program to facilitate long-term protection of essential fish habitat. Many have argued that these provisions have not been properly implemented and we will be discussing this problem with our witnesses today.

During recent trips home to Maine, I have had the opportunity to discuss reauthorizing the Magnuson-Stevens Act with a number of people who are most affected by it. Obviously, I am talking about fishermen and people who live in fishing communities. These are hard-working men and women who would probably rather talk about something other than changing Federal laws. But, I have listened to them, and many have very specific concerns with the way the law is being implemented.

Let me conclude my remarks by saying this—those most affected by the law believe that the Act is too rigid, that it is not being implemented properly by NMFS, and that, contrary to its mandate, the best science is not being used in management. As we begin the reauthorization process, we should try to make sure that sustainable fishing and good management becomes the norm and not the exception. Clearly, this reauthorization will have major implications for the future of marine fisheries in the United States.

Before I recognize our witnesses, I will turn to our ranking minority member for any comments that he would care to make.

I now recognize Senator Kerry for an opening statement.

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

Senator KERRY. Thank you, Madam Chairwoman.

I am particularly happy to welcome Penny Dalton back here. Her contribution to the Act that we are talking about here is very significant. There is nobody who understands better what we were setting out to do, and it is good to have her here.

I welcome all of the witnesses on the various panels who are here today for this hearing, and thank them for traveling to Washington to be part of it. The world of fisheries obviously is well understood by everybody in this room. We wish it were better understood by lots of other folks who have an impact on it who are not here today.

In 1997, the last figures we have, commercial fishing produced some $24.4 billion to the economy of our country. By weight of catch, the United States is the world's fifth largest fishing nation, harvesting over 5 million tons of fish annually. We are the second largest seafood exporter, with exports valued over $9 billion. In my home State—and I know the chairperson also shares this—we have an enormous connection to fishing, to the sea.

It is big business. But it is also much more than just dollars and cents. It is part of our culture and our social structure. In places like Gloucester or New Bedford, Massachusetts, as well as countless other maritime communities along our coastline, we have a very special connection to this industry.

So as we think about the reauthorization of the Magnuson-Stevens Act, we need to stay focused on the purpose of that Act and the long journey that we have traveled here in Washington, in trying to create the right balance between regulation at the Federal level and local decision making, local capacity to be able to try to manage this way of life. It is clear that the Sustainable Fisheries Act of 1996 was the single most important rewrite of Federal fishing laws since the original enactment of the Magnuson-Stevens Fishery Conservation and Management Act in 1976, when we extended the fisheries regulatory process to the 200-mile limit.

Senator Stevens and I, as the chairwoman commented, were the original cosponsors of the 1996 effort. We were joined by our committee colleagues, Senator Hollings and Senator Inouye, in embracing a number of specific goals: first, to prevent overfishing; second, to rebuild the depleted stocks; third, to reduce bycatch; and, fourth, to designate and conserve essential habitat.

Today, I am interested in the committee being able to continue the progress that we have made in the implementation of the Act. We all know, as we have seen in the groundfish situation in Massachusetts, in New England, there are a number of key fishery management challenges. That is not the only part of the country, obviously, where those challenges exist.

But it is obvious that the enactment of the SFA has raised a number of unanticipated questions for fishermen and for fishery managers that are still going to require further creative thinking and application of solutions. But I think the fundamental principles

laid out in the SFA remain well-founded. I do not believe that sweeping changes are necessary. Unless testimony today proves to the contrary, in my judgment, we are really looking at the reauthorization as a mid-course correction, a tweaking if you will, a fine-tuning of the Act.

One of the key issues that a lot of stakeholders seem to agree on is that we need to improve our data collection effort. We have always felt this. We are struggling with the resource issue. I know the chairwoman voted what I thought was correctly yesterday on a tax cut that is going to put—I mean this is just one sector; we could be in the Armed Services Committee, we could be in the Banking Committee, in VA, HUD—there are a whole host of areas where an excessive tax cut at this point in time is going to put further constraints on our ability to do the fundamental things that we have committed to doing.

One of them, in my judgment, is the establishment of a full-scale observer program that will give the councils the best available data so we can make the best informed decisions on fishery management issues. I fully support the implementation of a full-scale observer program that ensures that councils utilize the best science available.

A second issue, and I will try to wrap up here, a second issue is the progress made in identifying and protecting essential fish habitat. A number of councils have expressed difficulties in trying to identify essential fish habitat, mostly due to the lack of biological information or agreement about what is essential for fish stocks.

I agree that we need more research in order to be able to do a better definition of the linkages between habitat and fishery production. But we can still make management decisions, even in the absence of perfect data. We need to do so. I encourage NMFS and the councils to move forward to identify habitat impacts of fishing and non-fishing activities, which we are capable of doing, and to assess the need for protected areas to conserve fish stocks.

I would also like to explore new ways to provide incentives to fishermen to develop and use new habitat-friendly fishing gear, as other countries have done.

So, Madam Chairwoman, the Magnuson-Stevens Act requires councils to consider biological, economic and socio-cultural data in their deliberations. I hope that we can help find ways to provide that data to help them incorporate that into their decisions.

Finally, earlier this year, NMFS issued a proposed rule that would ban the use of spotter planes by fishing vessels in the bluefin tuna fishery in the general harpoon categories. That rule was to have been finalized by July 1, but it has not been. The administration has not yet issued a final rule. The rule was recommended by unanimous vote of the Advisory Panel for Highly Migratory Species. It is supported by the vast majority of fishermen. I urge the agency to finalize this rule expeditiously.

Now, I look forward to continuing to work with the chairwoman on the issue of finding funding for cooperative management activities in New England. She has worked hard on that. I would encourage the Secretary and the Administrator to increase their dialog

with fishermen at the grassroots level. I look forward to the testimony today.

Thank you, Madam Chairwoman.

Senator SNOWE. I want to thank you, Senator Kerry for those very thoughtful comments. I would concur with you on the banning of spotter planes. That rule is long overdue.

Senator Gorton, do you have any opening comments?

STATEMENT OF HON. SLADE GORTON, U.S. SENATOR FROM WASHINGTON

Senator GORTON. Madam Chair, this hearing is a welcome beginning of a series of hearings on the Magnuson-Stevens Act. I understand that you are planning to hold field hearings in Seattle and Anchorage, among other places, later this year, during which we can focus on issues of particular concern to Washington and Alaska, and can afford industry participants and other interested parties the opportunity to comment on the implementation of the Sustainable Fisheries Act and the Magnuson-Stevens reauthorization. I look forward to these hearings, as well.

I welcome Dr. David Fluharty, and thank him for coming. Fisheries management has to be among the most contentious issues I have had to deal with during my entire Senate career. Finding someone who can speak for the myriad of Washington interests fairly is no easy task. Dr. Fluharty has the advantage of being an academic, unaffiliated with any of the diverse and warring sectors in West Coast fisheries. Through his academic work and thoughtful and deliberative work on the North Pacific Council, has earned the respect of all of the many sides.

The last authorization of the Magnuson-Stevens Act 3 short years ago was hard to come by. It is my sincere hope that this next reauthorization will be less contentious, though there are a number of important and controversial issues that must be addressed. Among the issues of particular concern to Washington State are the lack of stock assessments and useful data on bycatch, State jurisdiction over Dungeness crab management for purposes of tribal allocations, effort reduction programs, and the availability of individual fishing quotas as a management tool in some fisheries.

To address the first issue, bycatch, it is my intention to introduce legislation that will enable the Pacific Council, as well as North Pacific Council, to adopt an industry-funded observer program. I will continue to support Federal funding for such a program, and recognize the need for this, given the drastic reductions in the groundfish quota. But, nevertheless, I feel it is important to enable the councils to collect fees should Federal funding be insufficient.

Another worrisome issue is NMFS's implementation of the essential fish habitat provisions in the SFA, an issue of far greater concern to non-fishery interests than to fishermen. Designating most of the State of Washington as essential fish habitat and requiring every Federal agency action to engage in an as-yet unspecified consultation process with NMFS could add an impenetrable layer of bureaucracy to an already heavily laden bureaucratic process provided by the Endangered Species Act, the National Environmental Policy Act, the Fish and Wildlife Coordination Act, and others, including of course all State laws.

But while there are difficult issues to resolve, we have the advantage of more information about some of them. On the issue of individual transferable quotas, for example, the National Research Council completed a study of ITQ's, which I hope will inform and facilitate our consideration of this management tool. The study does not, however, answer some of the more difficult policy questions about allocation.

Also making our authorization task somewhat easier this year is the elimination of the battle of the titans—the fight between the offshore and onshore pollock industries in the Bering Sea. Unfortunately, the resolution of this battle through the American Fisheries Act and the rationalization of the pollock industry has raised additional and very serious concerns involving the pollock catcher boats and the non-pollock harvesters and processors—concerns that I want to ensure receive a full hearing, either through this process or at a separate forum.

Madam Chairman, thanks for beginning the process. I look forward both to the beginning and to its continuation.

Senator SNOWE. Thank you very much, Senator Gorton, for those constructive comments on this reauthorization process.

We have a series of three votes. Ms. Dalton, we are down to about 4 minutes. Let me just say at this point, before we recess for probably 30 minutes here, that I welcome you to this Subcommittee. I know you are very familiar with this committee because you have served on the staff. This is your first appearance before this particular Subcommittee, so I cannot think of a more appropriate topic, given your familiarity with these issues, than discussing the reauthorization of the Magnuson-Stevens Act. I know your testimony and input will be of considerable value to us as we begin this process.

I should also tell the audience that Secretary Daley was going to appear before this Subcommittee, but when we realized that there were going to be three consecutive votes at 9:30, and he could have only stayed for an hour, then that time would have been used before he would be able to give his statement. So, with that, we will recess until the conclusion of the three votes. I would expect it would be about 30 minutes.

[The prepared statement of Senator Gorton follows:]

PREPARED STATEMENT OF HON. SLADE GORTON, U.S. SENATOR FROM WASHINGTON

Madam Chairman, this hearing is a welcome beginning of a series of hearings on the Magnuson-Stevens Act. I understand that you are planning to hold field hearings in Seattle and Anchorage later this year, during which we can focus on issues of particular concern to Washington and Alaska and can afford industry participants and other interested parties the opportunity to comment on the implementation of the Sustainable Fisheries Act and the Magnuson-Stevens reauthorization. I look forward to these hearings as well.

I welcome Dr. David Fluharty, and thank him for coming. Fisheries management has to be among the most contentious issues I have to deal with as a U.S. Senator, and finding someone who can speak for the myriad of Washington interests family is no easy task. Dr. Fluharty has the advantage of being an academic unaffiliated with any of the diverse and warring sectors in West Coast fisheries, and through his academic work and thoughtful and deliberative work on the North Pacific Council, has earned the respect of all of the many sides.

The last reauthorization of the Magnuson-Stevens Act, three short years ago, was hard to come by. I hope that this next reauthorization will be less contentious—though there are a number of important and controversial issues that must be addressed.

Among the issues of particular concern to Washington State are the lack of stock assessments and useful data on bycatch, State jurisdiction over Dungeness Crab management for purposes of tribal allocations, effort reduction programs, and the availability of Individual Fishing Quotas as a management tool in some fisheries. To address the first issue—bycatch, I intend to introduce legislation that will enable the Pacific Council, as well as the North Pacific Council, to adopt an industry funded observer program. I will continue to support Federal funding for such a program and recognize the need for this given the drastic reductions in groundfish quota, but nevertheless feel it is important to enable the councils to collect fees should Federal funding be insufficient.

Among the most worrisome issues is NMFS's implementation of the Essential Fish Habitat provisions in the SFA, an issue of far greater concern to non-fishery interests than fishermen. Designating much of the State of Washington as Essential Fish Habitat, and requiring every Federal action agency to engage in an as yet unspecified consultation process with NMFS could add an impenetrable layer of bureaucracy to an already heavily laden bureaucratic processes prescribed by ESA, NEPA, the Fish and Wildlife Coordination Act, and others.

But while there are difficult issues to resolve, we have the advantage of more information on some of them. On the issue of Individual Transferable Quotas, for example, the National Research Council completed a study of ITQs, which I hope will inform and facilitate our consideration of this management tool. The study does not, however, answer some of the most difficult questions about allocations.

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Madam Chairman, thank you again for beginning this process. I look forward to its continuation.

Senator SNOWE. Thank you.

[Recess.]

Senator SNOWE. The hearing is now reconvened. Since that time, we have added a witness.

Senator Kerry was asking for you, Mr. Garcia. I want to welcome you to the Subcommittee. We appreciate your standing in for the Secretary this morning. As you know, we had several back-to-back votes, and it probably will be that way all day long, with the tax bill. So we will try to move efficiently through this hearing. I really appreciate your being here this morning in place of the Secretary and I am looking forward to your participation.

So, let us begin with you.

STATEMENT OF TERRY D. GARCIA, ASSISTANT SECRETARY FOR OCEANS AND ATMOSPHERE; ACCOMPANIED BY ANDREW A. ROSENBERG, PH.D., DEPUTY ASSISTANT ADMINISTRATOR, NATIONAL MARINE FISHERIES SERVICE, U.S. DEPARTMENT OF COMMERCE

Mr. GARCIA. Thank you, Madam Chairman. It is a truly unexpected—I underscore "unexpected"—pleasure to be here. The Secretary had intended to be here, had looked forward to it, and regrets that he is unable to attend. I would like, with your permission, to read his opening statement before we begin. I will do that now, if you agree.

As always, I appreciate the opportunity to discuss fish with all of you. I recall one of the first conversations I had with your colleague, Senator Lott. The Majority Leader told me that when I think of him, I am to think fish.

Frankly, I think fish when I think of most of you. I do not have to tell this Subcommittee about the value our fishing industry provides to this country. You all represent some of our finest coastal States and fisheries. I have had the pleasure of being with many of you in your States. I have met with fishermen on their home turf—shrimpers in the Gulf, scallopers in New England, and salmon fishermen in Alaska. I have met with many of them here in Washington.

One of my finest experiences as Secretary of Commerce is becoming familiar with our fishing communities and appreciating their contributions, of understanding how the U.S. commercial fish industry generates more than $25 billion to our economy and employs 300,000 people. We are the fifth largest fishing nation, and our exports are valued at over $3 billion. It is an important recreational resource for millions of saltwater anglers. It is my support for this resource and the people it supports that brings me here.

It is easy to look at the past decades and see failure. Many important fish stocks are under great pressure, and we do not know enough about the health of many more. We do know our fishing grounds can be rebuilt to support far more fishing than they do today. Scientists estimate we could increase our catches 60 percent if we manage them better.

At the same time, we must recognize it took 20 years of poor management and good intentions gone wrong to bring us to where we were in 1996, when the Magnuson Act was overhauled into the Magnuson-Stevens Act. This administration is committed to the philosophy embodied in the Act. I believe the best way to restore our fisheries and sustain a growing economy is through the combined participation of public, business and government interests. We must apply the best science, including economics and social sciences, to help fishing communities move from traditional fishing management to newer, sustainable approaches.

I have strongly encouraged NOAA, the councils and all stakeholders to take advantage of the flexibility of the Magnuson-Stevens Act to develop creative solutions and partnerships. I have learned through my regulatory actions as Commerce Secretary that there is no "one-size-fits-all" solution. Each case has its own set of unique circumstances, conflicts and challenges.

Resolving these is not easy. These are contentious issues, as you well know. But the fact is, if we fail to come together, we will not have fishermen or fish left. Frankly, I think this is an important test of sustainable development.

Despite the challenges, I see hope in a number of small recent successes. I think, with Magnuson-Stevens, we are getting back on the track to build sustainable fisheries.

Let me illustrate, if I may, with the progress we are making with scallops in the Northeast. The first directive of Magnuson-Stevens is to end overfishing and rebuild fish stocks. In 1994, we were very concerned about groundfish and scallops off of New England. We took the aggressive and painful step of closing large areas to all fishing. Then, in late 1998, we learned that after over 4 years of closure, scallop stocks were recovering. In other words, the closure

was working to rebuild scallop stocks and it was time to start rebuilding the scallop fishery.

While Magnuson-Stevens directs us to rebuild fisheries, it also says: Use the best science available when we act. Though we knew that scallops were on the way back, our science was not detailed enough to act on it. Also, many raised concerns about starting up scalloping again. Scalloping disturbs the bottom and can have lots of bycatch of groundfish that still needed protection. It looked like yet another contentious issue.

So the first thing we did was ask for and listen to the advice of constituents. Soon, we came together around a shared goal: scallop if possible, while protecting other fish and the habitat. Then everyone contributed to a solution. We built an extraordinary partnership with industry and the academic community to find out exactly where the scallops were healthy and what areas could be reopened for scalloping.

Also, we talked to the industry about a management approach that would let scallopers catch scallops if they controlled their bycatch. For our part, we developed a new way to fund independent observers. I asked the council and NOAA to make sure the regulatory process kept moving. Magnuson-Stevens is clear that the council process is key to making management decisions. But that does not mean we cannot find ways to make it flexible and responsive to urgent needs.

I am pleased to say scallopers are fishing within a formerly closed area of Georges Bank nearly 9 months earlier than scheduled. In the last 6 weeks, the fleet has landed more than 2 million pounds of scallops, worth nearly $10 million. They are making money without compromising long-term sustainability. It is good news for the economy and good news for the environment.

My point is that the Magnuson-Stevens Act works. It does not need major changes at this time. What we need is to continue to work collaboratively and creatively. No question, we want to work with this committee on addressing outstanding issues, like individual transferable quotas and observer programs. We feel there is a need to collect more economic data to better understand and manage our fishery resources.

Penny Dalton will point out all of this in her testimony. Let me assure the members of this committee that I understand when we try new approaches, even though they may be incremental, there are often serious concerns from your constituents back home. So I want to work with you to take into account these concerns as we move forward with developing and implementing the legislation.

Thank you for asking me here, and I ask that my remarks be included in the record.

Senator SNOWE. Thank you.

Ms. Dalton.

STATEMENT OF PENELOPE D. DALTON, ASSISTANT ADMINISTRATOR, NATIONAL MARINE FISHERIES SERVICE, U.S. DEPARTMENT OF COMMERCE

Ms. DALTON. Madam Chair, members of the Subcommittee, I appreciate the opportunity to testify with Assistant Secretary Garcia

today on the Magnuson-Stevens Fishery Conservation and Management Act.

I am Penny Dalton, Assistant Administrator for Fisheries of the National Oceanic and Atmospheric Administration. I have to say it is really, really odd to be on this side of the table. [Laughter.]

Over the years, the Magnuson-Stevens Act has changed and evolved through several reauthorizations. Of these, the most significant probably is the revisions in 1996 by the Sustainable Fisheries Act (SFA). The Sustainable Fisheries Act strengthened conservation provisions to prevent overfishing and rebuild depleted fisheries, identify and protect fishery habitat, and minimize bycatch and discards of unusable fish. These new conservation requirements may have far-reaching effects on fishermen, their families and communities.

To address this concern, the SFA established a new national standard to ensure sustained participation of fishing communities and minimize adverse impacts. In addition, a national standard had been added on promoting the safety of human life at sea.

The SFA also provides a number of new tools for addressing problems relating to the transition to sustainable fisheries, including amendments to provide for fisheries disaster relief, fishing capacity reduction programs, vessel financing, and grants and other financial assistance. NOAA Fisheries has developed and published nearly all of the regulations and policy guidance related to SFA implementation.

In addition, the SFA required about 20 studies and reports to Congress that address critical issues in fisheries management. We will be using the findings and recommendations of these reports to improve our programs. They also contain a great deal of useful information that could inform and guide the reauthorization process.

The new SFA requirements necessitated amendments to each of the 39 existing fishery management plans. As of June 1999, 52 amendments were either approved or partially approved. Another two amendments were under Secretarial review. The remaining 13 amendments were scheduled to begin Secretarial review this summer.

Throughout this process, we relied on the regional fishery management councils. I cannot overemphasize the critical role and contribution of the councils in developing plans, resolving conflicts among stakeholders and making the transition to sustainable fisheries.

We are still working to understand and effectively implement the SFA, and would not propose major changes to the Magnuson-Stevens Act at this time. However, we have identified revisions in five areas that may be useful to improve efficiency and resolve some relatively minor problems.

No. 1, the SFA attempted to simplify and tighten the approval process for management plans and regulations. However, it creates two distinct review processes—one for plans and amendments and another for implementing regulations. As a result, the decision to approve or disapprove a plan or amendment may be necessary before the public has had an adequate opportunity to comment on the accompanying regulations. This disconnect should be addressed in the reauthorization.

In addition, the committee may wish to consider reinstating the initial review of fishery management plans and amendments by the Secretary. At present, 2 or 3 months may elapse before a plan or amendment is approved or disapproved. If it is disapproved, months may go by before the council can modify and resubmit it. While the initial review was eliminated by the SFA to shorten the review process, it actually may reduce the time needed to get a plan or amendment in place.

No. 2, the Magnuson Act current restricts the collection of economic data from processors. Removal of this restriction could improve the quantity and quality of information available to meet the requirements of the Regulatory Flexibility Act and other laws requiring economic analysis.

No. 3, special management areas, including those designated to protect coral reefs, hard bottoms and precious corals, are important commercial resources and valuable habitats for many species. Currently, we have the authority to regulate anchoring and other activities of fishing vessels that affect fish habitat. Threats to such habitat from non-fishing vessels remain largely outside agency jurisdiction. We would like to clarify and strengthen NOAA Fisheries authority to regulate the actions of a vessel that directly impacts resources being managed under the Magnuson-Stevens Act.

No. 4, the current description of the Caribbean Council limits its jurisdiction to Federal waters off Puerto Rico and the U.S. Virgin Islands. As a result, the council cannot develop plans governing fishing in Federal waters around Navassa Island or any other U.S. possession in the Caribbean jurisdiction of the Caribbean Council could be expanded to cover U.S. possessions.

No. 5, Magnuson-Stevens Act mandates currently result in the councils spending tens of thousands of dollars a year to publish meeting notices in local newspapers and regional fishing ports. By contrast, E-mail, public service announcements and notices included with marine weather forecasts are much cheaper and could be more effective in reaching fishery participants and stakeholders.

NOAA Fisheries takes seriously its new mandates under the SFA, and we are working to ensure that they are fully implemented. We recognize that the benefits of the changes we make now may take years, and perhaps decades, to realize. In addition, we must build consensus with the public and among various stakeholders to facilitate development of approaches that move us toward healthy and sustainable fisheries.

As Assistant Secretary has stated, we look forward to working with the Committee on the reauthorization and on the high priority policy issues, such as observer programs, individual transferable quotas, and funding and fee authorities.

This concludes my testimony. Thank you for the opportunity to discuss the Magnuson-Stevens Act. I am happy to answer any questions.

[The prepared statement of Ms. Dalton follows:]

PREPARED STATEMENT OF PENELOPE D. DALTON, ASSISTANT ADMINISTRATOR, NATIONAL MARINE FISHERIES SERVICE, U.S. DEPARTMENT OF COMMERCE

Madam Chair and members of the Subcommittee, thank you for inviting me to testify today on implementation and reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). I am Penny Dal-

ton, Assistant Administrator for Fisheries for the National Oceanic and Atmospheric Administration.

BUILDING A FOUNDATION FOR SUSTAINABLE FISHERIES

The fishery resources found off our shores are a valuable national heritage. In 1997, U.S. commercial fisheries produced almost $3.5 billion in dockside revenues. By weight of catch, the United States is the world's fifth largest fishing nation, harvesting almost 10 billion pounds annually. The United States also is the third largest seafood exporter, with exports valued at over $3 billion in 1996. In addition to supporting the commercial seafood industry, U.S. fishery resources provided enjoyment for almost 9 million saltwater anglers who caught an estimated 366 million fish in 1997.

As we approach the close of the 20th Century, we are at a crucial point in fisheries management, with considerable work ahead of us. In the 23 years since the enactment of the Magnuson-Stevens Act, we have seen the complete Americanization of fisheries in Federal waters, the expansion of the U.S. fishing industry, declines in many fishery resources, and the rise of public interest in fisheries issues. We have seen some successes from our management actions, including the initial rebound of a few depleted stocks like Georges Bank haddock, the rebuilding of Atlantic king mackerel, and the continued strong production of fish stocks off Alaska. However, 12 percent of U.S. living marine resources are overfished or are approaching overfished, 24 percent are not overfished, and there is another 64 percent whose status is unknown. Scientists estimate that we could increase U.S. fishery landings by up to 3 million metric tons by rebuilding fisheries and harvesting them at long-term potential yields.

The Magnuson-Stevens Act, of course, provides the national framework for conserving and managing the wealth of fishery resources found within the 197-mile-wide zone of Federal waters contiguous to the United States. To allow broad-based participation in the management process, the Act created eight regional fishery management councils (Councils) composed of State fishery managers, the regional NOAA Fisheries administrator, and qualified fishing industry, academic, and environmental representatives. Each Council has authority over the fisheries seaward of the states comprising it while NOAA Fisheries has management authority over most highly migratory species (e.g. swordfish) in the Atlantic ocean. The primary responsibility of the Councils is the development of fishery management plans that set the rules for each fishery and meet national conservation and management standards established in the Act.

Over the years, the Magnuson-Stevens Act has changed and evolved through several reauthorizations. In 1996, Congress ushered in a new era in fisheries management, making significant revisions to the Magnuson-Stevens Act in the Sustainable Fisheries Act (SFA). The SFA addresses a number of conservation issues. First, to prevent overfishing and rebuild depleted fisheries, the SFA caps fishery harvests at the maximum sustainable level and requires fishery management plans to rebuild any overfished fishery. NOAA Fisheries reports annually on the health of marine fisheries and identifies fisheries that are overfished or approaching an overfished condition. Second, the SFA sets a new direction for fisheries management that focuses on protecting fisheries habitat. To enhance this goal, the SFA requires that management plans identify habitat that is necessary to fish for spawning, feeding or growth. The new law also clarifies our existing authority to comment on Federal actions that affect essential fish habitat. Third, to reduce bycatch and waste, the SFA adds a new national standard requiring that conservation and management measures minimize bycatch and the mortality of bycatch that cannot be avoided. It also calls for management plans to assess bycatch and to take steps to reduce it.

The new conservation requirements may have far-reaching effects on recreational and commercial fishing and on fishermen, their families and communities. To address this concern, the SFA establishes a new national standard which requires, consistent with conservation objectives, that fishery management plans ensure sustained participation of fishing communities and minimize adverse impacts. In addition, a national standard has been added on promoting the safety of human life at sea. Finally, the SFA provides a number of new tools for addressing problems relating to the transition to sustainable fisheries, including amendments to provide for fisheries disaster relief, fishing capacity reduction programs, vessel financing, and grants and other financial assistance.

IMPLEMENTATION OF THE SUSTAINABLE FISHERIES ACT

NOAA Fisheries takes seriously its new mandates under the SFA. We are continuing to work to ensure that SFA requirements are implemented, and that con-

servation and management measures fully protect the resource and provide for the needs of fishing communities and the Nation. A great deal of work remains to be done. We are laying a better foundation for future fisheries management, yet the benefits of the changes made by Congress in 1996 will take years, perhaps decades, to realize. In addition, the management decisions that we face are becoming ever more complex and contentious, and good solutions are hard to come by. We need to direct resources and effort to the scientific and technical aspects of our work. We also must build consensus with the public and among various stakeholders to facilitate progress in developing management programs that will move us toward the goal of healthy and sustainable marine resources.

Regulations and guidelines.—Nearly all of the regulations and policy guidance related to SFA implementation (other than implementing regulations for plan amendments) have been developed and published. These regulations and guidelines address such issues as foreign processing in internal waters, observers' health and safety, procedures for monitoring recreational fisheries, secretarial emergency actions, and negotiated rulemaking. Proposed regulations for carrying out fishing capacity reduction programs were published in January 1999; final regulations currently are under review in the agency clearance process. However, sectors of the fishing industry that are interested in pursing buyouts can proceed with the development of buyout plans while this rule is being finalized.

The national standard guidelines were one important area where substantial revisions were necessary because of the significant changes made by the SFA. The national standards are the guiding principles for the management of our Nation's fishery resources, and any management plans or associated regulations prepared by either the Secretary or the Councils must satisfy the criteria which they establish. The Magnuson-Stevens Act requires that the Secretary prepare advisory guidelines on their application to assist in the development of management plans. The guidelines build on the national standards, providing more detailed advice for plan development and a guide to the Secretary in the review and approval of proposed plans and regulations. They were revised to reflect the changes made by the SFA and published as a final rule in May 1998. The final rule addresses the need to end overfishing, reduce bycatch and rebuild stocks, emphasizing use of the precautionary approach. It adds important guidelines on evaluating impacts on fishing communities, and provides guidelines to enhance safety at sea.

Among the changes made by the SFA, one of the most important may be a strengthened standard for preventing overfishing, accomplished by revising the definition of terms used in National Standard 1. The effect of this revision is to cap the optimum yield from a fishery at the maximum sustainable yield (MSY) and require all stocks to be rebuilt to and maintained at levels consistent with MSY. In addition, fishery management plans must establish clear criteria for determining when overfishing of a stock is occurring. NOAA Fisheries has worked with the Councils to develop an understanding of the new requirements to prevent overfishing. The Councils, in turn, have worked hard to develop new overfishing definitions, management programs to achieve the revised goals, and rebuilding programs where stocks were found to be overfished. This has proven to be a very difficult task—in part because of the complex biological structure of fisheries and complicated calculations of MSY and other fishery parameters—but also because of the necessity to consider impacts on fishermen and dependent communities while achieving conservation goals.

The Act calls for ending overfishing and rebuilding the fishery in the shortest time possible, taking into account a number of factors and within 10 years except under certain circumstances. As a result, the national standard guidelines allowed the Councils to take into account potential impacts on the industry or communities to extend the rebuilding period up to the 10-year limit, even when the stock could otherwise be rebuilt in a much shorter period. For long-lived and slow-maturing species like red snapper, the rebuilding period may be as long as the time it would take the stock to rebuild without any fishing plus a period equal to the species generation time. This solution balances the need to meet the conservation requirements within a reasonable period while minimizing effects on the industry and dependent communities.

Another significant change that resulted from passage of the SFA is the increased emphasis of the Magnuson-Stevens Act on conserving and enhancing essential fish habitat (EFH). NOAA Fisheries published a proposed rule in April 1997 for the implementation of the EFH provisions of the SFA, and an interim final rule in December 1997. The extended time frame was necessary so that all interested groups and individuals had ample opportunity for comments on the rulemaking. These rules establish guidelines to assist the Councils and the Secretary in the description and identification of EFH in fishery management plans, including identification of ad-

verse impacts on such habitat from fishing and identification of other actions to encourage conservation and enhancement of EFH. The rule also provides procedures for EFH consultations on actions that may adversely affect EFH. The interim final rule became effective in January 1998, and is treated as final for the purposes of implementing the EFH provisions. We currently are reviewing the comments received on the interim final rule and plan to issue a final rule early next year. This will enable us to benefit from experience with EFH consultations with other Federal agencies and from the practical experience we will have gained from the first round of fishery management plan amendments on EFH. To date, NOAA Fisheries has conducted over 400 consultations with Federal agencies whose actions may adversely affect EFH. We have completed seven agreements with other Federal agencies to establish specific procedures for using existing environmental review processes (e.g., NEPA) to handle EFH consultations, and we are working on 36 more. Federal agencies have been generally receptive to the new consultation requirements and have begun responding to NOAA Fisheries EFH conservation recommendations, as mandated by the Magnuson-Stevens Act. We expect consultations to increase as outreach efforts with Federal agencies continue to build awareness of the EFH statutory requirements.

Turning to Council operations, Council members currently are exempt from conflict-of-interest provisions of the criminal code, as long as they are in compliance with the financial disclosure requirements of the Magnuson-Stevens Act. Concern that these provisions were not adequate to prevent the financial interests of Council members from influencing the decision making process led to their revision in the SFA. As a result, NOAA Fisheries prepared regulations that prohibit Council members from voting on matters that would have a significant and predictable effect on any personal financial interests disclosed in accordance with existing regulations.

Amending fishery management plans to meet SFA requirements.—In addition to revising the national standards, the SFA established a number of other new requirements for fishery management plans that necessitate their amendment. NOAA Fisheries and the Councils have made dedicated efforts to meet most SFA deadlines for 121 major activities and approximately 400 separate tasks to bring fishery management plans into compliance with the new requirements. Commendably, this has been accomplished in a relatively short period of time. The SFA imposed a deadline of October 11, 1998 for amendments to each of the 39 existing fishery management plans to provide overfishing definitions; measures to prevent overfishing and rebuild overfished stocks; measures to minimize bycatch; descriptions of essential fish habitat; measures to minimize adverse effects of fishing on habitat; descriptions and analysis of trends in landings for commercial, recreational, and charter sectors; and assessment of effects on fishing communities. As of June 1999, 52 amendments were either approved or partially approved, another two amendments were under Secretarial review, and the remaining 13 amendments were scheduled to begin Secretarial review this summer. Despite the Councils' best efforts, there were some proposed amendments that did not satisfy the requirements, for which the analyses were inadequate, or that did not minimize socioeconomic or environmental impacts to the extent possible and achieve management objectives. NOAA Fisheries disapproved or partially approved those amendments and is working closely with the Councils to improve them, particularly in the areas of overfishing definitions, bycatch reduction measures, and EFH identification and protection.

I cannot over-emphasize the critical role and contribution of the Councils in implementing the SFA and bringing Federal fishery management into compliance with its new requirements. The Councils have performed admirably over the years in developing plans, resolving conflicts among stakeholders, and making recommendations to the Secretary, particularly in light of the controversy and conflicts surrounding many fishery decisions. While both NOAA Fisheries and the Councils are adjusting to the changes made by the SFA, we remain committed to working together in the transition to sustain fisheries.

Turning to the management of wide-ranging Atlantic fish like tunas and billfish, NOAA Fisheries has taken the lead in preparing management plans and rebuilding programs. Of these Atlantic highly migratory species (HMS), the following are currently classified as overfished: bluefin tuna, big eye tuna, Northern albacore tuna, swordfish, blue marlin, white marlin, and the 22 species that make up the large coastal shark management complex. Yellowfin tuna are fully exploited, with a fishing mortality rate that is probably above the levels that support the maximum sustainable yield. This past April, NOAA Fisheries completed a fishery management plan for Atlantic tunas, swordfish and sharks (HMS Plan) and an amendment to the billfish fishery management plan (Billfish Amendment) that contained rebuilding programs. Numerous and substantial changes were incorporated in the final rule to implement the HMS Plan and Billfish Amendment, based on the thousands

of public comments received by the agency. Advisory Panels established under the SFA and composed of representatives of commercial and recreational fishing interests and other knowledgeable individuals, including members of the ICCAT Advisory Committee, participated in the development of the management measures. The final rule became effective July 1, 1999.

Improving technical and scientific information and analyses.—Another initiative of the SFA was to establish a new title in the Magnuson-Stevens Act on fishery monitoring and research. NOAA Fisheries is committed to using the best possible science in the decision making process, and to incorporating biological, social, and economic research findings into fisheries conservation and management measures. Meeting our responsibilities under the Magnuson-Stevens Act and other applicable laws requires collection of a considerable amount of data, and in many fisheries we do not have all the data we need. We will continue to support a precautionary approach in the face of scientific uncertainty. At the same time, we are expanding our collection efforts and, wherever we can, partnering with the states, interstate commissions, fishermen and others to collect and analyze critical data. In addition, we are using a variety of methods to improve public input in the management process and the availability of socioeconomic data to assess and minimize impacts to communities and small entities and to meet the requirements of other applicable laws such as the Regulatory Flexibility Act.

Despite these efforts, we are vulnerable to overlooking or accepting alternatives with unanticipated effects, due to the limitations of our models and underlying data. NOAA Fisheries is addressing this vulnerability by placing a high priority on using funds to fill in gaps, particularly in the area of economic and social data collection and analysis. In January of this year, NOAA Fisheries delivered a Report to Congress entitled Proposed Implementation of a Fishing Vessel Registration and Fisheries Information System that calls for innovative state-Federal partnerships to improve the quality and quantity of information for marine resource stewardship. Such Federal-state partnerships are an important mechanism for sharing resources and reducing duplicative efforts.

Just as important as the collection of timely and complete data is sophisticated modeling to analyze the complex interactions between management measures and various impacts. State-of-the-art modeling techniques that incorporate information from the biological and social sciences, for instance, would improve NOAA Fisheries' ability to make accurate predictions about economic impacts and benefits. As we improve our capabilities to conduct integrated analyses, scientific assessments of the effects of management decisions on both fish and fishermen will be enhanced. This information will enable managers to choose the alternative that best balances conservation needs and community impacts.

Reports to Congress.—In addition to the data management report, the SFA required about 20 other studies and reports to Congress that address many critical issues in fisheries management. We will be using the findings and recommendations of these reports to improve our conservation and management programs. They also contain a great deal of useful information that could inform and guide the reauthorization process.

One of the most thorough and interesting of these reports is the National Research Council's study, Sharing the Fish: Toward a National Policy on Individual Fishing Quotas (IFQs), an examination of the issues surrounding the use of such quotas to manage fisheries. The report recommends that IFQ programs be retained as a fisheries management tool. It also contains a number of useful suggestions for developing potential ground rules for and key elements of IFQ programs if they are authorized.

Another NRC report, The Community Development Quota Program in Alaska, highlighted some of the current successes of existing CDQ programs, and recommended expanding the programs over the long term to ensure overall success in meeting a variety of community development goals. We look forward to transferring some of the lessons learned to future programs.

Earlier this month, the Federal Fisheries Investment Task Force released its report analyzing the Federal role in subsidizing expansion and contraction of fishing capacity. We will be looking closely at the recommendations in the report, including those that propose to rework existing programs and develop new funding mechanisms, to address problems of overcapacity and resource degradation.

The National Research Council's report entitled *Sustaining Marine Fisheries* and the *Ecosystem Principles Advisory Panel's Ecosystem-Based Fishery Management—A Report to Congress* both advocate greater use of the precautionary approach and an ecosystem-based approach to management. In the latter report, the authors maintain that the burden of proof must shift to the fishery to ensure that the ecosystem will not be harmed by fishing. They also suggest that we develop indices of

ecosystem health as targets for management. We will be looking to these reports and others for ideas as we continue to move toward ecosystem-based fisheries management.

REAUTHORIZATION ISSUES

We are still working to understand and effectively implement the changes to fishery management policies and procedures made by the SFA. Consequently, we would not propose major changes to the Magnuson-Stevens Act at this time. However, we have established an internal agency task force to evaluate SFA implementation, and the group has identified some revisions of existing provisions that may be useful to make the management process more efficient and to resolve some relatively minor problems. We currently are reviewing various issues raised by the task force, the Councils, and some of our stakeholders. Among the issues identified are the following:

Review process for fishery management plans, amendments and regulations.—The SFA attempted to simplify and tighten the approval process for management plans and regulations. However, one result of that effort has been two distinct review and implementation processes—one for plans and amendments and another for implementing regulations. This essentially uncouples the process for plans and amendments from the process for regulations, and as a result the decision to approve or disapprove a plan or amendment may be necessary before the end of the public comment period on the implementing regulations. This prevents agency consideration of public comments that could be germane to the decision on plan or amendment approval. We are considering amendments that would modify the process to address this issue.

In addition, the Committee may wish to consider reinstating the initial review of FMPs and FMP amendments by the Secretary. Considerable energy and staff resources are expended on plans or amendments that are ultimately disapproved because of serious omissions and other problems. At present, 2 to 3 months must elapse before the Secretary makes his determination, and if the amendment is then disapproved, it can be months or longer before the Council can modify and resubmit the plan or amendment. While the initial review was eliminated by the SFA to shorten the review process, it actually may provide a mechanism to shorten the time it takes to get a plan or amendment approved and implemented.

Restrictions on data collection and confidentiality.—As I indicated in the April hearing on this topic, the Magnuson-Stevens Act currently restricts the collection of economic data from processors. Removal of this restriction could improve the quantity and quality of information available to meet the requirements of the Regulatory Flexibility Act and other laws requiring economic analysis. In addition, the SFA changed the term "statistics" to "information" in the provisions dealing with data confidentiality. The change has raised questions about the intended application of those provisions, particularly with respect to observer information, and Congressional clarification would be useful.

Coral reef protection.—Special management areas, including those designated to protect coral reefs, hard bottoms, and precious corals, are important commercial resources and valuable habitats for many species. Currently, we have the authority to regulate anchoring and other activities of fishing vessels that affect fish habitat. Threats to those resources from non-fishing vessels remain outside agency authority except when associated with a Federal action that would trigger EFH consultation or where addressed in regulations associated with a national marine sanctuary. We suggest amending the Act to clarify, consolidate, and strengthen NOAA Fisheries' authority to regulate the actions of any recreational or commercial vessel that is directly impacting resources being managed under the Magnuson-Stevens Act.

Caribbean Council jurisdiction.—The current description of the Caribbean Council limits its jurisdiction to Federal waters off Puerto Rico and the U.S. Virgin Islands. As a result, the Council cannot develop FMPs governing fishing in Federal waters around Navassa Island or any other U.S. possession in the Caribbean. Jurisdiction of the Caribbean Council could be expanded to cover Navassa Island, by including "commonwealths, territories, and possessions of the United States" within the description of that Council's authority.

Council meeting notification.—Pursuant to the notification requirements of the Magnuson-Stevens Act, Councils spend tens of thousands of dollars a year to publish meeting notices in local newspapers in major and/or affected fishing ports in the region. By contrast, e-mail, public service announcements, and notices included with marine weather forecasts are much cheaper and could be more effective in reaching fishery participants and stakeholders. The Committee may wish to con-

sider modifying notification requirements to allow Council use of any means that will result in wide publicity.

We also look forward to working with the Committee on high-priority policy issues such as observer programs, individual transferable quotas, and funding and fee authorities. We appreciate the concern of the Congress and industry regarding the Administration's fee proposal, and NOAA is interested in working with all relevant parties to develop a viable fee proposal. However, at this time, we have no specific recommendations for changes in the Act to address these issues.

Madam Chair, this concludes my testimony. Thank you for the opportunity to discuss the implementation and reauthorization of the Magnuson-Stevens Act. I am prepared to respond to any questions members of the committee may have.

Senator SNOWE. Thank you, Mr. Garcia and Ms. Dalton, for your testimony here today, as we begin a series of hearings on reauthorization. I know that you are speaking, Mr. Garcia, on behalf of the Secretary. Ms. Dalton, you indicated that it really is not necessary to have any significant changes with respect to the Magnuson-Stevens Act. That may be true, and obviously we may reach that conclusion at the end of this process.

But, nevertheless, what concerns me is that somehow there is a belief that we are satisfied with the way in which the Act has been implemented, and particularly in response to some of the issues that were inserted in the Act in 1996. I would like to review that for you.

First of all, when it comes to responding to the social and economic impact on communities. That was a critical issue. The agency has gone through several lawsuits because it has not responded to the mandates under the Regulatory Flexibility Act. In addition, the lawsuits cited National Standard Number 8, an amendment that I offered in 1996, that in considering the management measure, you have to consider the socio-economic impact on the fishing communities.

That is an area in which the agency has not responded. That is obvious by the numerous lawsuits that have been filed. Further, we all know that 95 percent of commercial fishing businesses are small businesses. That is why the Department has been sued several times, because they have not responded to the Regulatory Flexibility Act and the mandate to consider the impact of regulations on small business.

Now, OSHA and EPA, for example, have set up panels to review the impact. That way, they have been able to measure the effect of their rules and regulations.

We are talking about flexibility, and we keep hearing it. But I would like to go beyond just stating the fact that flexibility should be part of this Act. We have to demonstrate a good-faith effort, that in fact we are flexible in managing the fisheries and that we are considering the impact of management decisions on fishing communities. That is the way we can best demonstrate flexibility. That was the genesis for National Standard 8. Certainly, the Regulatory Flexibility Act focuses on these issues as well.

The Department has not responded to that issue. That is the one thing I keep hearing over and over again. It is replete. You folks cite it. But you are in the position, representing the agency, to be flexible. We have not seen that response.

So, what are you going to do in your positions—and I am talking about here and now; I am not talking about 6 months from now or 8 months from now—what are you going to do to respond to the

mandate of flexibility with respect to the impact on the communities that are directly affected by the consequences of regulatory measures in fishery management plans?

Mr. GARCIA. I will start off, Senator, and then Penny can add to it. I also want to note that Andy Rosenberg, who is the Deputy Assistant Administrator for Fisheries, is here with us and is also available to answer questions.

I do not disagree with your point that the economic and social impacts of these measures must be taken into account. Nor would I challenge your concern that at times we have not fully implemented those directives. We have 2 to 2½ years of experience now. I think that the agency is making progress. The lawsuits are regrettable. The Secretary and I have both issued instructions that the highest priority is to be given to the consideration in these regulations of the economic and social impacts on communities, and that we are to take those into consideration as we develop management measures.

We are also concerned about resources in the agency to develop the necessary analysis, and we have devoted additional resources to it. We also have requests in the budget to add to those resources. But we are taking steps now to deal with it. I think that you will find, as we move forward, that we are doing a much better job of taking into account those issues.

We have always been concerned, this administration has always been concerned, about the impact that management measures have on communities. That is why we had sponsored the buy-out program in New England, to assist fishermen and fisherwomen who are impacted by these decisions. That is why we continue to be concerned about the need to deal with overcapacity in our fisheries, and the need to assist communities as they transition to a more sustainable fishery.

So we agree with you that these are issues that must have a high priority. The Secretary and I, as I said, have both instructed the Fisheries Service to give it high priority. We expect that these regulations, as they are finalized, will reflect that.

Penny, you may want to add to it.

Ms. DALTON. Yes. I think we do have a number of requirements that we have to meet to deal with the economic consequences. We do a regulatory impact review. We have to comply with the Regulatory Flexibility Act. We have to do a fishery impact statement as one of the requirements for fishery management plans. We have to meet the requirements of National Standard 8.

I think this is an evolutionary process in the Act. We have put increasing emphasis on the need to do economic analysis in the Act in recent years, and our bureaucratic processes have not always geared up to deal with it. We are hiring more economists. We have requested a million dollars in the fiscal year 2000 budget to beef up and increase the amount of economic and social data that we collect. So we are working with that.

Mr. GARCIA. Senator, could I also say, the point about the Act not needing a major overhaul or change, I still want to address that. As I said in the opening remarks, we do not feel that the Act needs to be changed in any major way. I think there is a distinction that we need to draw between implementation—and I take responsi-

bility for that, as does the Fisheries Service—and the Act itself. The Act has the tools in place that are needed to address these problems.

The question has been implementation. We are working hard to ensure that we follow the spirit of the authors of this legislation. As I said, I think that you will see, over the coming months, that we are doing an effective job in implementing the Act.

Senator SNOWE. Senator Breaux and I had sent a letter, requesting the GAO to conduct an investigation across the country. GAO has conducted four hearings on National Standard 8 because of the failure of NMFS to implement that Standard properly. Frankly, it is regrettable that we reached this point where we had to even pursue this option.

It suggests to me that the agency is not taking the issue very seriously with respect to the impact on the fishing communities. Frankly, the mandate of the Act is to consider all of these issues in a comprehensive fashion. That does include the social and economic impact on fishing communities. It is stated very clearly in the Act.

Now GAO has to conduct hearings—the most recent one was conducted in my State, in Portland, ME, in July—because the agency has not properly implemented this aspect of the Act. I continue to hear it.

So what is it going to take? What resources? What is necessary to change? Is it an attitude adjustment? What is it that will ensure that this is part and parcel of the overall consideration of the agency?

Ms. DALTON. I think that we are working internally to make the necessary adjustments in our resources. We did not have very many people with a lot of expertise on economic issues. We are hiring more people. We are going to be continuing to hire more people. This is also an area, because we did not have the expertise, we will get better. We freely admit that we have been weak in the area of doing economic analysis.

We have also been in touch with SBA and begun to work with them on improving our implementation of the Regulatory Flexibility Act. We have also been in touch with the Economic Development Administration within the Department. They have recently listed fisheries as among their priorities.

So we are reaching out to other agencies that traditionally have had that expertise. We are also working in house to improve our expertise, as well. But it is not going to happen overnight. But we will get better.

Senator SNOWE. Senator Inouye.

Senator INOUYE. Madam Chair, if I may follow up on your question. In the assessment of the impact, I have been told that one of the problems may be traced to the fact that self-employed fishermen are counted as farmers and miners in the census. Is that correct?

Ms. DALTON. I honestly do not know. We can find out for you and get back with you.

Senator INOUYE. I see people nodding their heads. If that is the case, I hope that steps will be taken to correct this for the 2000 census.

Ms. DALTON. OK.

Senator INOUYE. As you know, Hawaii is surrounded by water, and we have a lot of self-employed fishermen. I would hate to have them designated as miners. We do not have any mines in Hawaii. [Laughter.]

Senator INOUYE. Thank you.

Senator SNOWE. Thank you, Senator Inouye.

Senator Stevens.

Senator STEVENS. Thank you very much, Madam Chairman. I appreciate your holding this hearing. I am sorry I was late because of other problems.

First, Ms. Dalton, it was nice to have you seated behind me, but it is nice to see that you are where you are right now.

Mr. Garcia, I thank you for coming to Alaska. It is a trip that many people do not take, to western Alaska, so we are delighted that you took the time.

We had two major purposes for the Sustainable Fisheries Act: clarify the management policies for fisheries, and give the councils the tools to implement and enforce those policies. We had the general impression that the fisheries were overcapitalized and overfished. I thought for a while that the first was taken care of. I am not sure anymore now. But it is clear that many of the fisheries are still overfished.

The councils have begun to address these problems. I think the North Pacific Council—we will hear from them later—has done a good job of attempting to manage our own fisheries. We have, in the Sustainable Fisheries Act, required the North Pacific Council to file new amendments to its fishery management plan. Nine of those, I understand, have now been approved, which I think is a significant record for them. I do hope that we can get to some of the other issues that we have here.

First, I do not mean to be critical, but just to be specific—on the floor is the tax bill. The farmers are very aggressive. They have two significant amendments coming. One will enable farmers to establish a fund, like our old fund for boat owners, but it is a fund into which they can put up to 20 percent of their income, and keep that for 5 years, untaxed. If they have a disastrous year, they can pull that out and assist themselves, or they can keep it for the end. If it goes over 5 years, the first year is taxed in that sixth year.

Second, they have an income averaging concept, like artists have. They can have it rolling forward at least 3—I think it could be up to 5 years—of income. So that if they have a good year, then a bad year, they can go back and average and get some tax money back. They can continue to do that for the next year, as I understand it.

But although the census includes fishermen with farmers, fishermen are not included in the tax law with farmers. I think that ought to be your job. I think, within the administration, the National Marine Fisheries Service ought to be speaking up and NOAA ought to be speaking up more for fishermen, and ensuring that things we are doing to help farmers extend to fishermen as well.

I have got to go out this afternoon to do battle. Time is almost up. But it will be one of those amendments where we have no time to debate—maybe 1 minute to try and explain what we are doing.

But I really think that fishermen shouldn't have to fight for that right.

We have a lot of things like that that are sort of plaguing us as far as trying to get into these activities. I hope that we will have a hearing on the IFQ's later. It would take too long to really get into the discussion of IFQ's today. I do have some specific questions I would like to get into, if that is all right.

I understand that you have now a proposal to develop a data collection system that will preempt the States' systems. Particularly, Alaska has a fish ticket system, and the industry follows that system. Is that right, are you developing a new concept of data collection that would be inconsistent with the policies that already exist and have been approved by the existing regional councils?

Mr. GARCIA. Senator, if I could respond to two things.

First, to your point about assisting fishermen. As you know, I was with Dave Russell, from your staff, recently in Alaska. We visited several villages along the Yukon River, villages that contained 200 people, some 300, some 500. But they all had one thing in common, which was that they depend upon fishing. They are subsistence fishermen. The sole source of revenue in many cases is fishing. When the fish do not come back, these villages and the people who inhabit those villages are in very tough straits.

I agree with you that we need to develop a national strategy for dealing with problems, both of overcapitalization—which the Act does address—but also dealing with some of the natural occurrences that impact fishing and that—for example, in Bristol Bay, the Kuskokwim and Yukon areas have resulted in 2 years of disastrously low salmon returns that have impacted people in a very direct way.

We will have more of these incidents—perhaps not in Alaska, but in other parts of the country. We do need to have a comprehensive way of responding. So we are working toward that end. We would look forward to working with you and members of this Subcommittee in developing such a plan that would allow us to respond, along with States, in dealing with these problems.

On your second point, I will defer to Penny.

Ms. DALTON. One of the initiatives of the SFA was to establish a new title in Magnuson-Stevens basically on fishery monitoring and research. One of the things that was required in that new title was a study of vessel information and registration system. I think what you are talking about, if I am not mistaken, is the report that we did to respond to that section.

That section actually was developed—the State of Alaska was one of the primary people that were involved in developing it. The intent of it was to establish a cooperative State/Federal plan so you had a national data base.

The idea is the States have—and Alaska is a great example—have far more information that we do about what vessels are out there and what they are doing.

What we were trying to do is something actually that was modeled after the system in the North Pacific. It certainly would not preempt it.

Senator STEVENS. The industry and the State and our individual fishermen all—I am talking about the processing industry, the fish-

ermen and the State—are all in agreement with the regional council that we have a system that works. I would hope that if we are going to go forward, that system that is working will not in any way be crippled by a new national system that is trying to meet the needs and necessities in other places.

Recently—I will change the subject—recently, Andy Grove pointed out to me that at the turn of the century, 40 percent of the people of the United States were on farms or were involved in food processing and food gathering. I assume he would have included fishermen in that. At the end of this year, it will be 4 percent.

Now, with farms, that is a significant figure. But fishermen are still living on the seacoast, and we have a great problem with that, because there are many more fishermen today than there are fish. I think we need to find some plan for dealing with that. Because many of them cannot go into a city, like the farmers were able to, and adjust to another way of life. Fishermen are still out there, and many of them are in extremely disaster-ridden areas, in my judgment, along the entire coastline, not just in Alaska.

I am glad to hear you say, Mr. Garcia, you are looking at the concept of dealing with fishery failure for these communities. But I am concerned that the community and regional assistance has not been available through the SBA and the EDA. Are you working to coordinate their activities with these disaster plans? It seems we have to come up with disaster assistance after the fact in fishing communities. Whereas, if you look at the farm communities, they have a program that is there to reach out, and they know in advance that if there is either economic failure or a natural disaster failure, it means the farmer is in trouble.

We have to wait for the disaster to occur in order to trigger a response. Then it is probably almost 9 months late in getting there to assist these people.

Mr. GARCIA. That is right.

Senator STEVENS. Are you working on trying to bring that together, government agencies with the State agencies, so we can have a plan in effect and, if someone finds there is a disaster, we move to it like we do with FEMA? We need a FEMA for fisheries.

Mr. GARCIA. We are. One of the concerns expressed in the recent trip to Alaska, to the villages on the Yukon, was that some of the assistance, the medium-term and long-term infrastructure aid from EDA and SBA, were not getting to people as quickly as we might have hoped. It is our intention to call a meeting of the Federal agencies that are involved in the administration of these disaster funds, as well as the State, to talk about any mid-course corrections that we need to make. If there are statutory changes that we need, then we will be discussing it with the Subcommittee.

I think that the lessons we have learned in Alaska can be applied to other parts of the country. So the trip was timely. We gathered a lot of good information. As I said, we intend to meet with EDA, SBA, any other agencies that are involved—and the State, too, has to be part of this, because the State is administering much of the Federal assistance right now—and talk about what we need to do to make it more effective and to respond quickly to these problems.

Senator STEVENS. That is good. FEMA has been helpful when there is a natural disaster. But when you have a fisheries disaster, too often it is a combination of economic circumstances, just like the farmers of the country are facing right now. The Pacific Rim markets have collapsed, so the farmers have overproduction, and they are plowing away livestock now. They cannot sell it and they cannot feed it either.

Now, I think that we ought to have a similar plan to deal with fisheries, in terms of projections and knowledge of what is going on in the fishery community, so that there is a plan there. Again, I commend to you the two amendments we found in this tax bill. I think each one of them would help.

I know I have talked to some of the people in the Bristol Bay disaster. Several of those people had paid substantial taxes the year before. But there they were, with no capability of recovering any of that to meet their own needs. The farmers, under this bill, will be able to do so. I hope the Senate will listen to me and include fishermen today.

Let me shift gears to essential fish habitat. You have regulations that define essential habitat to include areas where there are no fish. Now, that disturbs me a little bit, because I do think we all have been very strong defenders—I spend a lot of my time trying to get people in the private sector to contribute money to protect fish habitat, but I did not know that you had used your authority to extend to areas where there are no fish under the essential fish habitat program. Can you tell me why you did that?

Ms. DALTON. I am not aware of any areas where we have actually defined it as no fish. The initial identification of essential fish habitat has been quite broad, and it encompasses—in Alaska, it would include probably most of the EEZ and also some inland areas where you have anadromous species. The definition of essential fish habitat under the law itself is anyplace where—any area or waters or substrate that are necessary for fish growth, breeding spawning. It basically is anyplace where a fish goes ends up being essential fish habitat. So that is one issue.

The other issue is that we do not know, or did not have a lot of baseline information, to do the initial identification of essential fish habitat. So, very often, what we did is use the entire range of the species.

Senator STEVENS. Well, that does have an impact on the State that has half the coastline of the United States, if every inch of the coastline is fish habitat. Because we are going to have a little bit of development along the line there. I would not want to see development which would interfere with fish runs. But, on the other hand, if there are no fish there but could be there later, I think you have to take a closer look at that one.

Ms. DALTON. What we have tried to do with these regulations, basically the only new authority, the authority for the councils and the Secretary to comment on activities that affected fish habitat has been there in the Act for 20 years.

Senator STEVENS. On the other hand, we have a lot of barren streams, streams where fish used to be. You know where they are located? In National Park Service areas, Fish and Wildlife refuge areas.

If you are right—I would like for you to be right—the fish habitat concept could go back in there and do something about restoring those fish runs. I am not sure you are ready for that battle yet. But I would like to see you think about it.

Ms. DALTON. OK.

Senator STEVENS. Because the concept—I remember distinctly the concept of not being able to have fishery enhancement projects in the Kenai moose range. Now, moose do not eat fish. So, therefore, that was not compatible. But then we went to the Kodiak Bear Refuge, and they said we could not do that there either. But bears do eat fish. There is an inconsistent policy in the agencies that are managing restricted areas as far as fish propagation is concerned. I would hope that the fish habitat concept would win.

Ms. DALTON. I guess part of it is we are not—the authority that is in the law just says that the Federal agency that is taking action that will affect the essential fish habitat has to respond to concerns that are expressed by either NMFS or the councils. It does not say that the activity cannot move forward. What we are trying to do is piggyback those kinds of consultations on top of existing activities that we have—things like 404 permits, under the Clean Water Act, NEPA analysis that needs to be done for Federal activities and things like that.

So hopefully it is not going to have any—it will bring a new dimension to those activities, so that people pay attention to their impacts on fisheries, but it should have no impact on them in terms of the processing of permits and things like that.

Senator STEVENS. Now, this is just a request, and I have got a bunch of questions I could ask. We are coming up to the end of the period on the moratorium on the IFQ's. I am not sure whether Congress will extend that in whole or in part. But without regard to that, we will certainly have some hearings. I would hope that you are spearheading the task of getting some real information about what has happened where there are IFQ's and where there are not IFQ's, so we can have some real factual information to deal with it.

One of the basic problems we have about the IFQ's is, the IRS believes those are property rights, they have property rights, and an IFQ permit is something that they can execute on, and then put it up for sale to someone that does not even know anything about the fishery. Suddenly we have a bunch of absentee owners that are executing rights with regard to a fishery. The IFQ was supposed to perpetuate the concept of people who know what they are doing and trying to harvest our fish.

I think we have to have some basic understanding of what an IFQ is. It is really not something that people pay for. Therefore, I do not know why the IRS should create a property right value in it and seize it. But that is just one of the issues that is involved in IFQ's. IFQ's also have a capability of bringing about a consolidation of vessel size if we are not careful. Because if you have an IFQ and I have one, and I want to go bigger, I buy yours and I go bigger. Suddenly, we are going into a matter of a new race between a larger boat and a fishery that was primarily made up of vessels of the same size.

I think we have to do something about the transferability of IFQ's. If a person wants out of an IFQ, I really think it ought to be returned to the source from which it came. I think our largest objection to IFQ's has been the fact that it will soon be a non-fishermen asset, owned by people who are more interested in the bottom line than they are in terms of preserving the species for the next generation.

So I am urging you to find a way to collect the data on what has happened under IFQ's, what are the problems there, before we get to the hearings, which I hope will take place either this fall or next year, about IFQ's. That is something beyond our ability.

We could put the GAO and the Library of Congress in it, but you all have got the expertise. If you need more money, Senator Inouye and I happen to be in a position to get you more money. [Laughter.]

Mr. GARCIA. We appreciate that.

Senator STEVENS. We would like to have you have people who are really looking at this from the point of view of establishing a policy for the Nation for the next century—at least for the first part of the next century—that will protect our fish and, at the same time, enhance the survivability of some of these fishermen. Because I really am worried about what is going to happen to fishermen. I think if we did a study—it would be interesting if you would do a study and see how many people really were fishing in 1900 as compared to those who really were harvesting fish and making money in the year 2000.

Andy Grove has got that figure for farmers, as I told you, but I think it would be very interesting. We ought to know what we are dealing with. Are we going to have to give incentives to people to catch fish?

I think, from a health point of view, we are better off to have our fish population healthy, and we will be healthy. I do think that we ought to have really a comprehensive review of that before we get to those hearings. So I urge you to help us do that.

Mr. GARCIA. Senator, we are gathering the data on IFQ's, and we look forward to the hearing. It is the agency's position that IFQ's are not property rights, and we have had discussions with the IRS. So we will look forward to discussing this with you further at the hearings.

Senator STEVENS. Well, I suggest to you, the next time around, I am going to insist that Congress legislate that IFQ's are not property rights, they are not to be sold. They can be transferred from generation to generation but, if there is no one within the family, they have to be turned back.

Thank you, Madam Chairman.

Senator SNOWE. Thank you, Senator Stevens.

Just a few additional questions on the groundfish fishery in New England. We have been waiting for a response to the emergency request made by the New England Fishery Management Council with respect to the groundfish fishery. The whole issue was nothing short of a disaster as it has impacted fishermen in my State and throughout New England. The Council should have made a different decision, which at the time the State of Maine was arguing,

and it should have been proportionate to the problem and where the problem had developed.

Now it has been 2 months. The daily trip limit for cod went from 700 to 200 pounds a day. They achieved that in a matter of weeks. Then the plan shifted to a 30-pound limit a day. Now there is a recommendation by the Council to go back up to 700 pounds.

What has happened in the meantime is that the fishermen have been catching cod as bycatch and have had to discard those cod. It has been 2 months, and there has been no response to the emergency request.

Mr. GARCIA. Yes, Senator. Let me respond today. Today we are filing an interim final rule with the Federal Register. Penny and Andy can both provide additional details. But this will increase the landing limits to 100 pounds daily, and establish a 500-pound trip limit, as well as restrict the so-called running clock provision that allowed people to go out, catch fish, come back, and then sit.

We think that while this is an interim response, it is not the long-term solution. We have urged the council to deal with the problem of bycatch in this fishery. We are looking forward to working with the council. If an acceptable management scheme is not developed, however, the Department is prepared to do what is necessary to protect this fishery and the fishing industry.

Senator SNOWE. So, when can we expect a final decision on this matter?

Mr. GARCIA. Well, it will be final once published. So the first of next week it is effective. But it is going to the Register today.

Senator SNOWE. How would the running clock proposal work with these changes?

Dr. ROSENBERG. Senator, the running clock proposal is changed, such that the trip limit applies for 100 pounds per 24-hour period. But instead of continuing to run your clock for whatever amount that you land, you are restricted to that 100-pound per day period and you have to wait to go back out until your time is allotted. Say, you have landed 200 pounds in a 48-hour period, you have to be at the dock for 48 hours until you can go back out again and catch more, as opposed to continuing to just run your clock and make another trip.

Senator SNOWE. How did you arrive at the 100 pounds now, since we have been all over the lot?

Dr. ROSENBERG. Well, we started the fishing year at 200 pounds, in May, on recommendation of the council, along with some additional closed areas. The tension here, of course, is between ensuring that there is a disincentive to target cod, while also allowing people to bring in bycatch. And 100 pounds, up to a 500 limit, was within the scope of options that the council analyzed and could be justified under the conservation guidelines for rebuilding the stock.

If we had gone—the council vote was for up to 700 pounds. That was outside the scope of what they had originally considered and, frankly, impossible to justify under the rebuilding program. So this provides some relief in terms of bycatch, but stays within the scope of the plan that they had put forward to us.

Senator SNOWE. To followup on the groundfish industry in general, we passed, under an appropriations bill last fall, $5 million to aid those who participate in the fishery. Again, the final rules

have not been issued with respect to how that money is going to be used. So now it has been about a year until the fishermen will see the benefits of this money to mitigate a disastrous situation in the groundfish industry in New England. Why has it taken so long to issue the regulations and how is this money going to be used?

Ms. DALTON. Part of it is I think we changed course a little bit after the money was appropriated. There was a decision made to work with many of the stakeholder groups in New England. They came up with a proposal that we work with them to go ahead and implement, that basically compensates fishermen who were adversely affected by the rolling closures last spring for their lost days at sea.

So one of the things that is going on is they are actually going to be compensated for the regulatory actions that we took this past spring. So there is no way for us to go ahead and do this until they turn in their logbooks. That will be by the end of July.

We have done the proposed regulation on it. We also had some issues that came up, like income requirements and things like that, that we have been getting worked out. We expect the rule to come down here and to go through the review process and be ready to be finalized sometime in the beginning, first week, of August. Then, when the fishermen go ahead and turn in their logbooks, they will be compensated this fall for that lost period of time.

Part of this is we are making—this is a brand-new program and a brand-new concept that we are trying to work through and make sure that it works effectively.

Senator SNOWE. On spotter planes, the harpoon category was closed last week by NMFS because the quota had been achieved. Most of the bluefin tuna had been caught in that category by the use of spotter planes. NMFS has not issued a rule on this issue out of fear of litigation.

Now, I cannot believe that there are not lawyers within the Department that could come up with a rule that would not invite litigation or at least could withstand a lawsuit. Why has this taken so long? What is going to happen now?

Mr. GARCIA. All of our rules seem to invite litigation these days.

Senator SNOWE. Some you fear more than others.

Mr. GARCIA. Yes. The key, as you point out, is withstanding the judicial challenge. We did issue a proposed rule on spotter planes, banning spotter planes in the fishery.

We have been challenged on that rule. We were recently taken back to court by the plaintiffs. The judge felt that it was not ripe for a decision at this point because it was just a proposed rule, although he did very clearly indicate that he did not like the proposed rule.

So we are very carefully now reviewing the record with the Justice Department, as well as the Department lawyers, to make sure that when and if we issue that final rule, that we have a rule that will pass judicial muster. As I said, we had a proposed rule that banned spotter planes, and we are working very hard now to try to finalize that rule. We have received a number of comments. We are analyzing those. The Justice Department has expressed its concern to us about the rule. We are working with them to make sure

that we have a rule that is strong and will do what we had intended.

Senator SNOWE. Will that be sooner rather than later?

Mr. GARCIA. It would be soon, yes. Sooner rather than later. I cannot give you a precise date.

Senator SNOWE. On essential fish habitat, again, final rules have not been published on that. When do you expect that to occur?

Ms. DALTON. What we are doing with that is we are beginning now—we have an interim final rule that has gone into effect. What we are hoping to do is basically go through—we have done about 400 consultations now on essential fish habitat, and the process seems to be working well—is to do this very deliberatively, so that we make sure that the final rule is one that will actually work. What we are doing is trying to take advantage of our earlier experiences with the consultations, to try to make sure that the system is responsive to the needs.

Senator SNOWE. Are you going to be very careful in not implementing it in a way that is too broad? Have you been able to determine the best way to do that? That seems to be the major issue with respect to how we are going to define what our essential habitats are.

Ms. DALTON. The broadness of the identification of the areas is based on the scientific information that we have and on the definition that is currently in the Act. What our guidelines have focused on is trying to integrate any consultations or any requests or concerns that the councils and the Department have about activities that could affect essential fish habitat into existing permit processes.

One of the things that Terry Garcia has been very involved in is, we have a pilot program now in California that we are going to be doing that is going to be one-stop shopping for all of these different types of permits. We chose it there because we also have the salmon/ESA issues going on. It will also pull in marine sanctuary permits and permits for national estuary and research reserves. So that when somebody has something that they are doing in one of these areas, they only have to make one call on the National Oceanic and Atmospheric Administration to get their permits.

Mr. GARCIA. I just want to say that there has been some concern expressed in various quarters that we are creating a new regulatory program. That is just not true. That was not the purpose of the Act, and it was not our intent in promulgating regulations. We have to identify essential fish habitat.

That is a necessary piece of information for the councils as they move forward in amending their fishery management plans. We need to consult with other Federal agencies when their actions may affect essential fish habitat. But we are not trying to use this as a mechanism to reach other activities that had not formerly been regulated. It is just not true that we are using it in that way.

The consultation mechanism which people have questioned, we have gone to great lengths to ensure that we are not duplicating efforts, that we are not creating a new consultation mechanism where others could do the job. So that if someone has to consult under the Endangered Species Act, we will use the Endangered Species Act consultation to satisfy EFH. Similarly, if there is an-

other consultation that is ongoing, we will use that consultation to satisfy the EFH consultation.

I think that when the various groups that have expressed concerns about this rule see how it is implemented, they will agree with us that this is not a threat, it is not going to interfere with business, and that it is useful information that the councils will be able to incorporate into their fishery management plans, and that we will not be creating multiple consultations where one would do just as well.

Senator SNOWE. Is it true that NMFS is pursuing a subdefinition that would include habitat areas of particular concern? Would that probably more closely approximate what Congress had in mind with respect to this mandate?

Dr. ROSENBERG. Senator, we are urging the councils, although it is council prerogative, to identify habitat areas of particular concern. One of those areas in New England, for example, is on the so-called Northeast Peak, as groundfish habitat.

We feel that helps prioritize the conservation measures that might be needed or comments that we might provide to other agencies in terms of those areas that can currently be identified with the available science as clearly of particular concern, usually as nursery habitat for young fish. So that is one of the mechanisms we have used to narrow down the focus and prioritize the various kinds of consultations.

Senator SNOWE. I have other questions that I will submit.

But let me just say in conclusion that I think it would be very important to think about how the Department could respond to the issue of flexibility and identify a way that would implement the whole concept of National Standard 8, to minimize adverse economic impacts as a result on fishing communities. The agency should continue to consider the Regulatory Flexibility Act and the significant economic impact their regulations have on small businesses because 95 percent of commercial fishermen are small businesses.

Obviously, the Department has failed in the regard. It gets back to what Senator Stevens was raising—the whole issue of whether or not we are going to have fishermen in the future. We have got to consider how these management plans affect individuals and, collectively, as communities. If the Department is disregarding that aspect, it is disregarding an entire segment of our economy and a very important one at that.

So I think it requires a change in the way you address issues. For so long, obviously the mandate has been to look at the fish, which stocks have been overfished, how you are going to rebuild the fisheries, but you were not looking at the entire picture. Now, we have grave concerns that the entire picture is wreaking havoc on fishing communities. So we have got to do both. They are not mutually exclusive. So we cannot pursue this narrow path without looking at the whole picture. That is now the mandate of the Act.

I would encourage you to do what OSHA and EPA have done. That is to set up specific panels that look at the rules and regulations and how they have an economic impact on small business. In the case of fishermen, they certainly are small businesses. I would encourage you to adopt that emphasis within the Department. Be-

cause I think that if you do not give it that kind of consideration, it is just going to be disregarded in the future.

Mr. GARCIA. Senator, we will do whatever is necessary to comply with the law.

Senator SNOWE. I appreciate it. I do not think it means that you disregard the health of the fish stocks. That is not what we are talking about. But we have to look at the entire health of the industry, as well. So I think it is critical. Obviously the Department has not figured out how to address that aspect of its responsibilities.

If you have multiple lawsuits in this area alone, I think you would have to acknowledge that the Department has been deficient in this area.

Senator INOUYE. Madam Chair.

Senator SNOWE. Yes, Senator Inouye, go ahead.

Senator INOUYE. I would like to take this opportunity to thank Assistant Secretary Garcia, Ms. Dalton and Dr. Rosenberg for being so helpful to the Western Pacific Regional Fishery Management Council. I have been receiving communication from them, expressing their gratitude.

As you know, we have problems that are unique in the Pacific, and also in the Atlantic. I hope that you will take into consideration some of the cultural issues that we are having problems with.

If I may, Madam Chair, I would like to submit a few questions.

Senator SNOWE. Without objection, so ordered.

Senator INOUYE. Thank you.

Thank you very much.

Mr. GARCIA. Thank you.

Senator SNOWE. Again, I want to thank you, Mr. Garcia, Ms. Dalton and Dr. Rosenberg, for being here today and taking the time. I am sorry it took so much time, because of the votes, but I thank you.

Mr. GARCIA. Thank you, Senator.

Senator SNOWE. Thank you.

We will proceed with our second panel of distinguished witnesses. Our first witness will be Mr. Thomas Hill, from Gloucester, MA. Mr. Hill is a marine surveyor and a member of the New England Council.

We will also hear from Ms. Maggie Raymond, from Portland, ME. Ms. Raymond has had a significant amount of experience in commercial fisheries in New England. She has seen dramatic changes in an industry faced with many serious problems and difficult choices.

We will also hear from Mr. Rick Lauber, from Juneau, AK. Mr. Lauber serves as the chairman of the North Pacific Fishery Management Council.

Dr. David Fluharty, a research associate professor at the School of Marine Affairs, the University of Washington, will be the final witness of this panel.

Would everybody step forward? I would ask you to limit your statements to 5 minutes, if you could. You can summarize them and I can include your entire statements in the record.

STATEMENT OF MAGGIE RAYMOND, MEMBER AND SPOKESPERSON, GROUNDFISH GROUP, ASSOCIATED FISHERIES OF MAINE

Ms. RAYMOND. Chairwoman Snowe, good morning. My name is Maggie Raymond. I am the spokesperson for the Groundfish Group of Associated Fisheries of Maine. I am also the wife of a fisherman. My husband, John, has fished for 25 years. Together, we have managed our own successful fishing business for the past 13 years. I am pleased to be here today to offer the views of the Groundfish Group on the Magnuson-Stevens Act and the Sustainable Fisheries Act.

Senator Snowe, as you know, commercial fishing makes a significant contribution to Maine's economy, and our fishing families and communities define the charm and the character of our State. The last several years have been difficult, but we are committed to ensuring that fishing remains a strong component of Maine's economy. I want to assure you that our membership is dedicated to the revitalization of the resources on which our industry depends.

The cornerstone of the Magnuson-Stevens Act is the scientific principle expressed as maximum sustainable yield. The Sustainable Fisheries Act has reaffirmed MSY. The National Marine Fisheries Service guidelines have elevated MSY to the dominant factor in decision making.

Although there are many issues attendant on the Magnuson-Stevens Act that your Subcommittee will be considering—and I do hope you will allow us a future opportunity to speak to those—there are few as significant as the questions related to the validity of MSY as a management tool, the scientific information used to support MSY-based decision making, and the impact of MSY-based decision making on the fishing community.

Senator you did not invite me here today so that I could pretend to be a scientist. Believe me, I am not going to do that. I am sure that in the 5 minutes I have today, I could be more successful at selling you a boat-load of fish than I could ever be at selling you the idea that I fully understand fishery science.

Maximum sustainable yield has been explained to me in the very simplest of terms as an assumption that a stock of fish exists in equilibrium. MSY does not fully factor in all the complexities of the environment or the ingenuity of fishermen, and therefore does not represent conditions as we know them to exist in the fishery. It is for this reason that MSY is considered flawed and has been rejected by many in the scientific community.

Unfortunately, this flaw has been exacerbated by the SFA.

The SFA mandates the achievement of MSY by defining overfishing as a relative mortality level that jeopardizes the capacity of the fishery to produce MSY. Furthermore, the SFA redefines optimum yield to mean that which provides for a rebuilding of an overfished fishery to levels consistent with the production of MSY.

In response to the SFA, NMFS has published guidelines to assist the councils in meeting their new obligations. In response to the criticism of MSY, the agency responds,

MSY is the key to the Magnuson-Stevens Act even more so than under the former Magnuson Act. MSY now constitutes an upper limit on optimum yield. NMFS be-

lieves that the lack of flexibility imposed by ascribing such a fundamental role to MSY was clearly an intent of Congress.

The problems with MSY-based management are more apparent when one considers the basis of the scientific information used to support the fisheries management process. Although an imperfect analogy, it is valid nonetheless to point out that one cannot measure the size of a stock of fish as one would count head of cattle. The marine environment can be hostile, and it is remote. Of necessity, stock assessments are statistically driven, and decisions are based on the probability that the statistics are right.

NMFS recognizes, "The difficulty of estimating MSY is a significant problem that will require the best efforts of NMFS and the councils to solve."

Because MSY is central to SFA management and is admittedly imprecise, the consequences of this imprecision is damaging to the fishing community. This is particularly so because NMFS advocated the risk-averse approach as highly desirable for estimation of MSY and the criteria used to set target catch. Despite the potential for inaccurate stock assessments and the agency's claim that allowing for the uncertainty inherent in the estimate of MSY is important, it is the view of our members that neither the SFA nor the agency will allow the flexibility to free councils to consider social and economic factors when confidence levels around MSY and optimum yield are low.

This brings me to the most important point I wish to make today—that being that the SFA and NMFS guidelines, in spite of the best intentions of National Standard 8, simply do not allow management decisions to consider the social and economic needs of fishing communities. The changes made to the definition of optimum yield have reduced economic impacts on fishing communities from a relevant factor which could be used to justify optimum yield to a subordinate concern. We are very concerned that unless the balance is restored, it will be impossible to maintain our traditional dependence upon the fisheries.

Senator Snowe, you asked me today to speak specifically to the current situation with cod in New England. With your indulgence of an additional minute, I can do that.

The current status of Georges Bank cod, along with the most recent management advice for that stock, provide a good example of the need for flexibility within the law to allow the balancing of measurable progress in the resource with the needs of the fishing community. Five years ago, the New England Council took the unprecedented step of closing year-round the known spawning areas on Georges Bank. This simple principle of providing complete protection to aggregations of spawning fish resulted in what is now likely a permanent closure of over 6,000 square miles of world-renowned fishing grounds.

As a regrettable consequence, many harvesters and processors, including many from Maine who were dependent on that catch, are now out of business. This action also, predictably, resulted in great leaps forward in the rebuilding status of Georges Bank cod. Now, fishing effort is down, the Georges Bank cod stock is rebuilding, and the target total allowable catch has increased every year. But because landings have out-paced the target, additional restrictions

on fishing effort are mandated. Despite obvious progress and the magnitude of that progress, the principle of MSY does not allow the recognition of that achievement.

On the other hand, when it came to Gulf of Maine cod, the council simply could not bring itself to ignore the severe economic impacts that would result from the restrictions mandated to meet the rebuilding schedule. So, instead, it recommended, and National Marine Fisheries Service approved, measures both knew to be inadequate. To compensate, included a default mechanism, a lowered trip limit, intended to keep landings within the numbers allowed. The conservation goals were achieved on paper, but landings have been converted to discards, and both the fish and the fishermen now suffer.

As I said at the outset, we are committed to sustainable fisheries and we have willingly made many sacrifices. We have always found strength through faith in our abilities and in our community. But the events of the past few years, and especially the potential impacts of the SFA, have shaken that faith and raised concerns that our community may be changed forever.

I hope you will seriously consider these issues, and I urge you to seek the counsel of those with the expertise to guide you in this task. Thank you again for this opportunity to be here.

[The prepared statement of Ms. Raymond follows:]

PREPARED STATEMENT OF MAGGIE RAYMOND, GROUNDFISH GROUP, ASSOCIATED FISHERIES OF MAINE

Chairwoman Snowe and Members of the Subcommittee on Oceans and Fisheries, my name is Maggie Raymond. I am a member of and spokesperson for the Groundfish Group of Associated Fisheries of Maine. Associated Fisheries of Maine is a trade organization of fishing and fishing dependent businesses. The Groundfish Group is an ad hoc committee formed to represent the interests of the Association's harvesters in fisheries policy development.

I am also the wife of a commercial fisherman. My husband, John Raymond, is a career fisherman with over 25 years experience in different fisheries in the Northwest Atlantic Ocean. Together we have managed our own commercial fish harvesting business for the past 13 years.

I am pleased to be here today to offer the views of the Groundfish Group on the Magnuson-Stevens Act and, specifically, the implementation of the 1996 amendments referred to as the Sustainable Fisheries Act.

Senator Snowe, as you know, commercial fishing makes a significant contribution to Maine's economy, and our fishing families and communities define the charm and character of our state. The last several years have been difficult for our industry, but we are committed to ensuring that the industry remains a strong component of Maine's economy. It is for this reason that the members of Associated Fisheries are dedicated to revitalization of the fishery resources on which our industry depends.

With the initial passage of the Magnuson-Stevens Act, many felt that fisheries management had been put on a rational footing; that those with practical and scientific experience with the fisheries would collectively guide us and that we would regain control of our fishery resources. The cornerstone of the Magnuson-Stevens Act is the scientific principle expressed as maximum sustainable yield and it is this principle which has served as the foundation for all fisheries management decisions for nearly a quarter century.

But if this central tenant of fisheries management, this principle of maximum sustainable yield, is valid, then why does it appear that we have made so few gains in the status of our fisheries resources? Fisheries management as prescribed under the Act has not been successful; that is clear and there are few that would dispute that statement. But many have cast about looking for some human failure, placing blame on fishermen and the men and women who serve on management councils. While I readily admit that human errors, including my own, have played a role, in my view, the most significant cause for fishery management failures is the hubris

which led us to believe that we can render the complexities of Mother Nature to a two dimensional equation. The principle of maximum sustainable yield in fisheries management is seriously flawed and has been repudiated by many in the scientific community as not accurately depicting conditions as they exist in the fisheries. Nevertheless, this principle remains the fundamental component of U.S. fisheries management, and despite scientific evidence against MSY, the SFA has reaffirmed its use, and the National Marine Fisheries Service guidelines have elevated its use to the dominant factor in decision making.

Senator Snowe, although there are many issues attendant to the Magnuson-Stevens Act that your Subcommittee will be considering—and I do hope you will allow us a future opportunity to speak to those—there are few as significant as the questions related to the validity of MSY as a management tool, the scientific information used to support MSY-based decision making, and the impact of MSY-based decision making upon the fishing community.

Senator, I am not a scientist and I won't pretend to fully understand the science of fishery management.

Maximum sustainable yield in a fishery, as I understand it, is based upon an assumption that a stock of fish exists in equilibrium. Simply put, it assumes that if the number of fish in a stock changes as a result of environmental conditions or fishing, for example, that the growth of the stock will automatically adjust to compensate for that change. Over the short run, this is perhaps so. But over the long run, the time frame within which our fisheries are managed, this assumption has proven to be wrong. MSY assumes away the complexities of the environment and even the actions of fishermen and treats them as simple events. Intuitively we know, and many in the scientific community have confirmed, that the complexities of the environment and of human decision making can not be rendered unidimentional—they can not be assumed away as they are under MSY. It is for this reason that so many have rejected MSY as a scientific principle.

Unfortunately, this fundamental flaw in Magnuson-Stevens has been exacerbated by the SFA. The SFA mandates the achievement of MSY by defining overfishing as a relative mortality level that jeopardizes the capacity of the fishery to produce MSY. Furthermore, the SFA redefines optimum yield to mean that which provides for a rebuilding of an overfished fishery to levels consistent with production of MSY. With all due respect, given the flaws inherent in the MSY principle, these changes amount to pretzel logic and that has fisheries managers tied in a knot.

In response to the SFA, NMFS published regulations referred to as guidelines to assist the management councils in meeting their new obligations. In its summary, its response to public comment, and its guidelines, NMFS has pledged itself to the MSY principle. In response to criticism of its use of MSY, NMFS responds; "MSY is the key to the Magnuson-Stevens Act, even more so than under the former Magnuson Act. MSY now constitutes an upper limit on OY . . . NMFS believes that the lack of flexibility imposed by ascribing such a fundamental role to MSY was clearly an intent of Congress."

NMFS also cites Congress' willingness to delete the modifying words "long term" when referring to the capacity of a stock to produce MSY and concludes "(u)nless MSY is established as a strict goal, the greatly enhanced benefits anticipated by enaction of the SFA cannot be achieved." Unfortunately, the only flexibility the Council's had in addressing the flaws inherent in MSY was in setting the optimum yield over the long term, flexibility which was removed by the Gilchrist amendment which states specifically that OY can no longer exceed MSY.

The flaws of MSY-based management become more apparent when one considers the basis of the scientific information used to support the fisheries management process. Although perhaps a trite comment or an imperfect analogy, it is valid nonetheless to point out that one cannot measure the size of a stock of fish as one would count head of cattle. The marine environment can be hostile and it is remote. Of necessity, fishery stock assessments are statistically driven, sample sizes are typically low, and decisions are based on the probability that the statistics are right. What this means is that the best science available can in reality be nothing more than an educated guess and perhaps more often than not derived by seat-of-the-pants methods.

NMFS recognizes that ". . . the difficulty of estimating MSY is a significant problem that will require the best efforts of NMFS and the Council to solve." Because MSY is central to SFA management and is admittedly imprecise, the consequence of this imprecision is damaging to the fishing community. This is particularly so because NMFS advocates the risk adverse approach as highly desirable for estimation of MSY and the criteria used to set catch targets. Despite the very great potential for inaccurate stock assessments and the agency's claim that "(a)llowing for the uncertainty inherent in the estimate of MSY is important . . ." it is my view that nei-

ther the SFA nor the agency will allow the flexibility necessary to free Councils to consider social and economic factors when confidence intervals around MSY and OY estimates are low.

This brings me to the most important point I wish to make today, that being the SFA and NMFS guidelines, despite the addition of National Standard 8, simply do not allow management decisions to consider the social and economic needs of fishing communities. The changes made to the definition of optimum yield have reduced economic impacts on fishing communities from a relevant factor, which could be used to justify an optimum yield, to a subordinate concern. The NMFS guidelines allow consideration of the needs of fishing communities only as a means of adjusting the rebuilding period and only when that rebuilding period is less than 10 years. We are very concerned that, unless the balance is restored, it will be impossible to maintain our traditional dependence upon the fisheries.

Senator Snowe, you asked me today to speak specifically to the current situation with cod in New England. The current status of Georges Bank cod along with the most recent management recommendations for that stock provide a good example of the need for flexibility within the law to allow the balancing of measurable progress in the resource with the needs of fishing communities.

Five years ago, the New England council took the unprecedented step of closing year-round the known spawning areas on Georges Bank. This simple principle of providing complete protection to aggregations of spawning and juvenile fish has resulted in a 5-year closure of over 6,000 square miles of world-renowned fishing grounds. As a regrettable consequence, many harvesters and processors, including many from Maine, who were dependent on the catch from those areas, are now out of business. This action also, predictably, resulted in great leaps forward in the rebuilding status of Georges Bank cod, haddock, and yellowtail. Fishing effort is down, the GB cod stock is rebuilding, *and* the target total allowable catch has increased every year. But because annual landings have outpaced the target, additional restrictions on fishing effort are mandated. Despite obvious progress, and the magnitude of that progress, the principle of MSY simply does not allow for recognition of that achievement.

On the other hand, when it came to Gulf of Maine cod, the council simply could not bring itself to ignore the severe economic impacts on fishing communities that would result from the restrictions recommended to meet the rebuilding schedule. So instead, the council recommended and NMFS approved, measures both knew to be inadequate, and to compensate included a default mechanism—a lowered trip limit—intended to keep landings within the numbers allowed. The conservation goals were achieved on paper, but landings have been converted to discards, and both the fish and the fishermen must suffer.

As I said at the outset, we are committed to sustainable fisheries and we have willingly made many sacrifices. We have overcome many obstacles, and have always found strength through faith in our abilities and our community. But the events of the past few years and, especially, the potential impacts of the Sustainable Fisheries Act have shaken that faith and raised concerns that our community may be changed forever.

Senator Snowe, I urge you to seriously consider the issues I have raised here today and implore you to seek the counsel of those with the necessary expertise to guide you in that task.

Senator SNOWE. Thank you very much.

Mr. Hill.

STATEMENT OF THOMAS HILL, MEMBER, NEW ENGLAND FISHERY MANAGEMENT COUNCIL

Mr. HILL. Thank you, Madam Chairman. It is an honor to be here today to speak on this important issue. For the record, I am a member of the New England Fishery Management Council. My past fishing experience was largely related to the recreational passenger boat industry in New England. I am testifying here today on my own behalf and do not represent the views of the Council. In fact my views are significantly diverged from the views of many of our council members.

I think it is difficult to imagine anywhere in the country where fisheries management is not as contentious and visceral as it is in

New England. We have had probably some of the greatest controversies in fisheries management in recent memory.

I would like to begin by making the premise that I think healthy fish stocks generally ameliorate many of the social and economic costs and concerns that are stated in terms of the social consequences of tough fisheries regulations. It is the goal, in my opinion, of the Act that we maintain and ensure healthy fish stocks in order to prevent the social and economic dislocations that occur when we have depressed fish stocks.

On the other hand, it is very difficult to achieve rebuilt fish stocks without having social and economic costs. It is clear that many of the Council's actions over the past several years have been intended to try to avoid the social and economic consequences of trying to rebuild overfished stocks. In that attempt, the council has used various input controls and soft TAC's in order to try to avoid closing fisheries which have attendant social and economic impacts on the industry that we serve.

In my opinion, though those measures have been well intended, we have exceeded our target TAC's 4 years running, which has led to the consequences of the Gulf of Maine codfish situation, where we spent the principal, so to speak, in the bank of the codfish stocks by allowing ourselves to go over our target TAC's on a regular basis.

There are four separate issues that I think are critical in the coming revision that I think would be helpful in the council in terms of either technical or biological information that will help us to make decisions, in addition to some standards that I believe each council ought to be held to what I believe will assist the council in focusing its attention on the issues that will improve the stock conditions in a way that will provide the greatest benefits to the Nation.

The first is that I believe, as has been mentioned earlier—I believe it was by Senator Kerry—I believe in a full-scale observer program. It is impossible to manage some of these stocks with the level of information that we have. The recent revision of the Act required the council to pass management plans for all of the stocks under our jurisdiction. Many of those stocks have poor or inadequate science.

In the stocks where we have overfishing conditions, it is very difficult to make finite management changes with stock information that is a year to 15 months old. We need more real-time data in order to make critical decisions that are based on the best science in order to avoid the kind of social impacts that the wrong decision will make. It will strengthen the council's ability to be thoughtful and deliberate about our decisions and avoid those consequences that I think everybody wishes to.

The second thing I believe that would he helpful and I think productive is to work on an industry-based science program that assisted the National Marine Fisheries Service and other bodies that collect conditions for the council in order to have an industry participation that will strengthen their faith in the science that we use.

Third, I believe that the requirement for mortality targets, the standards by which we set are often set in terms of a 10-year time-

frame. In my opinion, it is clearly apparent that when you look out into the future in overfished stocks, it is very easy for the council to look off into the future and delay the significant mortality cuts up front because of the social costs.

My recommendation is that the council should be required to establish TAC's for the stocks under their jurisdiction, and then to be required to implement regulations that ensure that the fish stock targets are met in the fishing year that we are fishing in. The overages that we have experienced in fishing have taken the principal out of the bank. Just like in a business, when you do not have a budget that you live within, the following year you have economic consequences that cause further cuts in your budgetary process. If you are not careful, it leads to bankruptcy.

In my opinion, that physical discipline is occasionally lacking in an environment where the social costs to fish mortality reductions have significant impacts in the communities that we affect.

Finally, I believe just as critically that we must address the issue of economic and social data collection. We do not have adequate data to assess the social and economic impacts that fishery regulations have. It is clear to me that the Congress intends for us to do the best we can in making those decisions and ameliorating those impacts. I must tell you that the data is totally inadequate.

It is clear that the analysis to do so and the difference between my Port of Gloucester and the Port of Newberryport both have fishing fleets and the impacts of different regulations are totally different. The substantive analysis that is required to do community-based impact analysis is sadly lacking. I urge the Senate, in their deliberations of the reauthorization, to address that issue.

But I think, finally and in closing, that I would suggest that even if the council knows what those impacts are, if we are clear about what those impacts are, what does that mean in a fishery that needs to be rebuilt? Their options are very few. That the impacts are clear, the alternatives are few because, in rebuilding a fishery that is overfished, there are always social and economic consequences.

My own view is that if we rebuild fisheries as rapidly and as straightforwardly as we can, with as straightforward regulations as we can, the social and economic benefits from a rebuilt fishery outweigh the short-term costs if we are deliberate and we do our job and rebuild fisheries and not make compromises that prolong the agony of the rebuilding process.

Thank you, Madam Chairman. I am grateful to be here. I will be happy to answer any questions.

[The prepared statement of Mr. Hill follows:]

PREPARED STATEMENT OF THOMAS HILL, MEMBER, NEW ENGLAND FISHERY MANAGEMENT COUNCIL

Madame Chairman and members of the Subcommittee, thank you for inviting me to testify on implementation and reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). I am Thomas Hill, a member of the New England Fishery Management Council. I was appointed to this position, based on my past experience, to provide the council a perspective regarding the recreational fishing sector of New England. I have already served one 3-year term on the Council and was recently reappointed to a second. I would like to make it clear that my testimony represents my personal views and that I do not speak

on behalf of the New England Fishery Management Council. In fact, on many issues, I represent the minority view on the Council.

It is difficult to imagine anywhere in the country where fishery management issues are as visceral and contentious as in New England. I am a native of Gloucester, Massachusetts, where fishing has been a way of life for nearly 400 years. My community's economy and culture have been built around its ability to harvest fish from the Gulf of Maine and Georges Bank. For many years, it appeared to many that the ocean held an endless supply of fish. However, over the last 20 years, due to our collective failure in managing the resource, we have observed a steady decline in most of our stocks.

As an illustration of our management policies, the current plan in the Gulf of Maine restricts a fisherman to 30 lbs. of cod per trip in certain areas. This might amount to a catch of one good fish per trip, and potentially results in the discard of thousands of pounds of dead fish. Clearly, in too many cases, the council and the fishing industry leadership have been more interested in limiting short term social or economic impacts than in ensuring the healthy rebuilding of fish stocks. The council has been more concerned with the reaction their decisions might receive, than in ensuring the effectiveness of the fishery management plans themselves. As a result, we have experienced greater dislocation than might have occurred if other choices had been made.

I would like to address several issues today that I believe should be considered during reauthorization of the Magnuson-Stevens Act. While my perspective is based on my experience on the New England Fishery Management Council, I feel many of the regional councils face similar challenges. In my view, the following issues should be given priority during consideration of this legislation:

(1) Establish a full-scale observer program;
(2) Develop a cooperative industry-agency science program;
(3) Allow an average Maximum Sustainable Yield for aggregate species;
(4) Require a performance standard for mortality targets, such as setting a hard Total Allowable Catch; and
(5) Provide for the collection of economic data.

ESTABLISH A FULL-SCALE OBSERVER PROGRAM

National Standard 2 in the Magnuson-Stevens Act requires the Councils use the best science available. We need information in a timely manner to fulfill our responsibilities under the Act. A first-class observer program that gathers real-time data is desperately needed. This should be both required and funded.

The Act was changed during the last reauthorization to require management plans for all the species under the Council jurisdiction. For many of these species we have incomplete and sometimes inadequate science. We need to ensure that the Council has the best available data to make the decisions that are incumbent upon it. This should include current assessment information, which should be no more than 6 months old. To use data that is 12 to 15 months old (as we now do) to make management decisions, undermines the trust and confidence we must have with the community to make our decisions. For example, in the recent Gulf of Maine codfish situation, if we had had observers on board the fishing vessels, we would have known immediately upon opening the fishery that we were experiencing high by-catch beyond the limits that were set, and the Council could have taken immediate action to avoid the ugly aspects that occurred in this debate.

DEVELOP A COOPERATIVE INDUSTRY-AGENCY SCIENCE PROGRAM

Involve the fishing industry in the collection of data where possible. Ensure that the development of science needs and the utilization of platforms include the fishing industry wherever possible. Done properly, the fishermen can have input into the science and subsequent rules that will regulate them—it will build confidence. The fishermen have hands-on, practical knowledge that a non-fisherman will never have. Farming practices would never be regulated without the input of farmers. Fishery practices should be provided the same level of respect.

ALLOW AN AVERAGE MAXIMUM SUSTAINABLE YIELD FOR AGGREGATE SPECIES

Allow the Councils to manage for the average Maximum Sustainable Yield (MSY) for those species that are caught in aggregate. Given some thoughtful discussion about the way the language of the Act is crafted, Congress could acknowledge the interrelationships of various fish stocks and set thresholds for the minimum but not necessarily the optimum yield. There are two ways to view this issue:

First, Congress' intent is that all stocks will be re-built without regard for the social and economic costs. As an example, if you are using a control on "days at sea"

as your primary mortality tool, you will be setting your days at sea schedule to the lowest common denominator of the stock complex to insure rebuilding, since each stock in a stock complex must be maintained at optimum yield. You will therefore forgo the social and economic benefits that would be derived from capturing the other stocks that may be in abundant and in excellent biological condition while you try to re-build a single stock that is depressed.

As an alternative, the Councils could be allowed to conduct aggregate assessment/management plans for those stocks that are interrelated in terms of habitat and likely removal by commercial and recreational gear. So on average, the stocks that are involved are above the MSY, even though one stock may be below the MSY. This would avoid triggering significant restrictions by the Councils and would maximize the total yield and therefore the total value of the entire fishery. Because the multi-species fish stocks are caught in aggregate, we end up managing for the fish stock in the worst condition no matter what the economic or social cost with respect to the other stocks. This may be a lost opportunity. There needs to be a way to manage for the highest aggregate rebuilding, coupled with the maximum economic and social benefit.

Congress could acknowledge this type of stock interrelationships and set thresholds for the minimum but not necessarily the optimum yield. This issue would require some hard thought to provide a way of doing this, but is significant enough to be raised as a concern without offering a specific solution.

REQUIRE A PERFORMANCE STANDARD FOR MORTALITY TARGETS, SUCH AS SETTING A HARD TOTAL ALLOWABLE CATCH

The Magnuson-Stevens Act should require that the Councils set a hard Total Allowable Catch (TAC) limit for each species under their jurisdiction. Requiring the setting of a hard TAC on an annual basis will hold the Councils and industry to a standard of performance regarding the setting and meeting of mortality targets. This needed discipline will help ensure a clarity of thought and testimony before the Council.

For example, the mortality tools currently used (i.e., trip limits, Days-At-Sea, area closures) have allocation implications built into them. A given fisherman will support one tool, but not another depending on his/her allocation interests, as much as whether it will help insure a healthy fishery. In other words, the mortality tools have become a surrogate for stock allocations among the various sectors of the industry (small boat, big boat, inshore, offshore, etc.) versus whether they will insure meeting the mortality targets.

This change would require that the Councils draft and submit Fishery Management Plans that meet the TAC goals within the year in question, to ensure that the mortality targets are not exceeded in each fishing year. This would avoid the exponential increase in the degree of restrictions caused when the mortality targets are exceed by using soft targets, as is currently common in many fisheries management plans. This then requires more restrictions on the industry in future management actions for the following year.

PROVIDE FOR THE COLLECTION OF ECONOMIC DATA

I find it extremely frustrating that the council does not have data that would enable us to incorporate socio-economic information into fishery management decisions. The Magnuson-Stevens Act specifies the collection of biological, economic, and socio-cultural data to meet objectives of the Act and for the fishery management councils to consider this information in their deliberations. However, Section 303(b)(7) specifically excludes the collection of economic data, and Section 402(a) precludes Councils from collecting "proprietary or confidential commercial or financial information." NMFS should not be precluded from collecting such proprietary information so long as it is treated as confidential information under Section 402. Without this economic data, multi-disciplinary analyses of fishery management regulations are not possible preventing NMFS and the Councils from satisfying the requirements of the Magnuson-Stevens Act and the Regulatory Flexibility Act (RFA).

Assuming that the council does have accurate socio-economic information available, the larger question still remains: "How does the council make changes in proposed management measures if there are negative socio-economic impacts forecast for the needed reductions in fishing mortality?" This unresolved issue is at the heart of many of the disagreements about policy development in New England today. The consequence of taking expedient short term management steps in lieu of a long term approach has led to a series of measures which have not resolved the biological concerns and in fact have led to severe economic and social dislocation.

Madame Chairman, I would like to thank you for this opportunity to comment on the Magnuson-Stevens Act reauthorization. I'm also happy to answer questions or provide further information about the positions taken by the Council chairmen.

Senator SNOWE. Thank you very much, Mr. Hill.

Mr. Lauber.

STATEMENT OF RICHARD B. LAUBER, CHAIRMAN, NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

Mr. LAUBER. Good afternoon, Madam Chairman. Thank you for the opportunity for me to offer comments related to the implementation of the Magnuson-Stevens Fishery Conservation and Management Act. As requested, my comments will focus on the implementation of the 1996 amendments, the Sustainable Fisheries Act.

In addition to the provisions which apply to all of the Nation's fisheries, there were, as you know, many provisions in the 1996 amendments which were specific to the North Pacific Council and the fisheries off of Alaska. Beginning in late 1996, and continuing to the present, the North Pacific Council, along with the National Marine Fisheries Service, the Alaska region has devoted a tremendous amount of time and energy to implementing the provisions contained in those amendments.

I am happy to say that those efforts have paid off, and the implementation of those amendments have improved our fishery management process and strengthened the long-term viability of an already healthy fishery in the North Pacific.

I would like to make note of some supplemental materials that we have supplied your committee on more detail in what we have done. This packet here should have come to you and your staff and the other members of the Senate. I hope you will find these materials useful, and I believe they will show that we have made some very significant progress.

I would like to speak to the specific things that were mentioned in the Sustainable Fisheries Act. One of them was the overfishing definitions. Overfishing definitions, according to the mandates of the SFA, are now in place for all species managed by our council. With the exception of Tanner crab, currently managed by the Alaska Department of Fish and Game, there are no overfished species in the North Pacific, though we actively manage over 100 species or species complexes of groundfish and crab. The Tanner crab is the subject of an aggressive rebuilding plan drafted by the council, the National Marine Fisheries Service and the Alaska Department of Fish and Game, which is scheduled for implementation this next January.

As required, we have developed a comprehensive description of essential fish habitat for all species we manage, and are now concentrating on identification of habitat areas of particular concern, based on ecological functions and vulnerability to man-made impacts. I think Dr. Fluharty may speak more to that.

Our council has found the use of marine protected areas to be a particularly useful tool for managing bycatch and protecting habitat. Vast areas of the North Pacific have been permanently closed to groundfish, trawling and scallop dredging to protect habitat and juvenile crab. These marine protected areas comprise a relatively

large portion of the continental shelf and, in my respects, serve as marine reserves.

In the Bering Sea, habitat area closures encompass about 30,000-square nautical miles. This is an area more than twice the size of Georges Bank, off the coast of Massachusetts. Bycatch has been a focal issue for our council over its 23-year existence. We spend a significant amount of our time addressing bycatch management allocation and reduction.

Since enactment of the 1996 amendments, the council has taken specific actions, such as banning on-bottom trawling for pollock, established an incremental Chinook salmon bycatch reduction in trawl fisheries from 48,000 Chinook salmon down to 29,000 by the year 2003, and our developing, in cooperation with industry, a halibut mortality avoidance program, and reducing the maximum retainable bycatch amount for several species, including sablefish and rockfish.

Among the provisions of the SFA is the reduction of economic discards. The council has implemented and improved the retention and utilization program, which took effect beginning in 1998, and which prohibits the discard of all pollock and Pacific cod in all North Pacific fisheries, regardless of gear type or fishery. This measure has drastically reduced discards of groundfish.

For example, in 1997, about 22,000 metric tons of cod—almost 9 percent of the cod catch—and 95,000 metric tons of pollock—about 8.2 percent of the pollock catch—was discarded. In 1998, discards amounted to only 4,300 of cod, approximately 2 percent, and 16,000 of pollock, about 1.5 percent.

We also have entered into a total catch measurement system, where we are requiring scales in many of our fisheries. We have, as you know, a comprehensive onboard observer program which, by the way, in my opinion, without such an observer program, we would not have had such healthy fisheries. We have had observer programs in place for 10 years or longer. We commend them. There are problems with them, but they still are very, very important to us.

Madam Chairman, I am cutting my remarks close to reduce the time, but I do not pretend that our system is perfect by any means or that there is not room for improvements, whether those improvements originate with the council or in the congressional arena. Our council respects the intent of the 1996 amendments, and has worked extremely hard to bring those to pass.

We also stand ready to respond to any new amendments that come out for the pending reauthorization, and to provide any input into the process that you require. Thank you, Madam Chairman.

[The prepared statement and information of Mr. Lauber follows:]

PREPARED STATEMENT OF RICHARD B. LAUBER, CHAIRMAN, NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

Good morning Senators, and thank you for the opportunity to offer comments related to implementation of the Magnuson-Stevens Fishery Conservation and Management Act. As requested, my comments will focus on implementation of the 1996 amendments (the Sustainable Fisheries Act), and you will find more detailed comments attached to my summary oral comments. Also attached is a copy of the recommendations which arose from the Council Chairman's meeting which was held last month in Rhode Island. These are consensus recommendations from the eight Regional Councils regarding the upcoming reauthorization of the Act. I believe these

recommendations were provided last week to the House Subcommittee on Fisheries, Conservation, Wildlife, and Oceans by Joseph Brancaleone, Chairman of the New England Council. I provide these collective Council recommendations for your reference and would be happy to try and answer any questions related to those recommendations. For now however, I will return my comments to implementation of the 1996 amendments.

In addition to provisions which apply to all the Nation's fisheries, there were as you know many provisions in the 1996 amendments which were specific to the North Pacific Council and the fisheries off Alaska. Beginning in late 1996 and continuing to the present the North Pacific Council, along with the National Marine Fisheries Service—Alaska Region, have devoted a tremendous amount of time and energy to implementing the provisions contained in those amendments. I am happy to say that those efforts have paid off, and that implementation of those amendments has improved our fishery management process and strengthened the long-term viability of an already healthy fishery resource in the North Pacific. I would like to take this opportunity to toot our own horn a bit and note that the North Pacific Council had already initiated several conservation related management programs at the time of passage of the SFA, and that the amendments therein provided both a mandate to follow through on those initiatives as well as a mandate for additional measures. I can assure you that the fish harvesters and processors in the North Pacific are as dedicated as anyone to preserving and maintaining the health of our fisheries and oceans, and we welcome the past and future efforts of Congress to provide us the tools to realize that goal.

I would like at this time to make note of the supplemental materials I have provided—you will find these in the white folder with our Council logo—which summarize the overall management philosophy of the North Pacific Council and provide examples of what we are doing as fisheries managers to protect these fisheries, and to incorporate habitat considerations and a broader perspective of ecosystem management. I hope you find these materials useful and I believe they will serve to instill some confidence that we are, with your guidance, operating as responsible stewards of our national marine resources off Alaska. I would like to speak further to some of the Council's actions in response to the provisions of the SFA. Most of those provisions are fully addressed by Council actions since 1996 while others are in the iterative stages of implementation.

Again, details on our implementation schedule for all issues covered by the 1996 amendments are contained in the attachment that has been provided. I would like to spend the remainder of my time briefly addressing a few of the specific actions that we have taken to implement the mandates of the SFA.

Overfishing definitions.—Overfishing definitions, according to the mandates of the SFA, are now in place for all species managed by our Council. With the exception of Tanner crab, there are no overfished species in the North Pacific, though we actively manage over 100 species, or species complexes, of groundfish and crab. Tanner crab is the subject of an aggressive rebuilding plan drafted by the Council, National Marine Fisheries Service, and Alaska Department of Fish and Game, which is schedule for implementation this January.

Essential Fish Habitat.—As required we have developed a comprehensive description of essential fish habitat for all species we manage, and are now concentrating on identification of Habitat Areas of Particular Concern (HAPC), based on ecological function and vulnerability to man-made impacts. Concurrent with that effort will be the necessity to evaluate potential impacts of fishing gears and implement additional measures as necessary. Our Council has found the use of marine protected areas to be a particularly useful tool for managing bycatch and protecting habitat. Vast areas of the North Pacific have been permanently closed to groundfish trawling and scallop dredging to protect habitat and juvenile crab. These marine protected areas comprise a relatively large portion of the continental shelf, and in many respects, serve as marine reserves. In the Bering Sea, habitat area closures encompass about 30,000 square nautical miles. To put this in perspective, this is an area larger than Indiana or Maine and more than twice the size of Georges Bank off the east coast of the United States.

Bycatch Reduction.—Bycatch has been a focal issue for the Council over its 23 year existence and we spend a significant amount of our time addressing bycatch management, allocation, and reduction.

Since enactment of the 1996 amendments the Council has taken the following specific actions:

- Banned on-bottom trawling for pollock;
- Established an incremental chinook salmon bycatch reduction in trawl fisheries from 48,000 chinook down to 29,000 chinook by year 2003;

• Are developing, in cooperation with industry, a halibut mortality avoidance program (HMAP); and
• Reduced the maximum retainable bycatch (MRB) amount for several species, including sablefish and rockfish.

Additional measures have been proposed and are awaiting development pending other pressing Council issues such as Steller sea lion protection and implementation of the American Fisheries Act.

Waste and Discard Reductions.—Among the provisions of the SFA is the reduction of economic discards. The Council has implemented an Improved Retention and Utilization Program (IR/IU) which took effect beginning in 1998, and which prohibits the discard of all pollock and Pacific cod in all North Pacific fisheries, regardless of gear type or fishery. This measure has dramatically reduced overall discards of groundfish. For example in 1997, about 22,100 mt of cod (8.6 percent of the cod catch) and 94,800 mt of pollock (8.2 percent of the pollock catch) were discarded. In 1998, discard amounted to only 4,300 mt of cod (2.2 percent) and 16,200 mt of pollock (1.6 percent). These rates are not 0 percent as might be expected because at certain times of the year regulatory discards come into play, which are required to avoid exceeding the total allowable catch (TAC). A regulation requiring full retention of all demersal shelf rockfish species was adopted in 1999. Flatfish retention will be required beginning in 2003—the delay will allow for development of new markets and gear technological responses by the vessels engaged in these fisheries. These overall retention requirements are expected to reduce total discard rates (all species) from about 15 percent to about 5 percent.

Total Catch Measurement.—One section of the SFA requires the Council to develop and submit measures to ensure total catch measurement in each fishery under our jurisdiction, and to require weighing of all fish if necessary. I feel confident when I say that North Pacific fisheries are the most tightly managed and monitored in the U.S. Between the National Marine Fisheries Service in-season management division, the Alaska Department of Fish and Game fish ticket system, catch reporting requirements, the U.S. Coast Guard, the NMFS Enforcement Division, our comprehensive on-board fisheries observer program, and requirements for weighing of fish in many of our fisheries, we have a good handle on the amounts of catch, bycatch, and discards occurring in the North Pacific. The Council initiated scale requirements for some of the pollock fisheries as early as 1994 to help tighten catch estimates. In specific response to the mandates of the SFA, our Council has undertaken a review of our estimation procedures which has included an assessment from the National Marine Fisheries Service, an assessment from the Alaska Department of Fish and Game, and an in-depth assessment by our Scientific and Statistical Committee (SSC) which is comprised of some of the most respected stock assessment scientists and fish population dynamics experts in the country. These assessments have resulted in suggestions for incremental improvements to our existing program, but overall have endorsed our catch measurement system as adequate, specifically in reference to the mandates of the SFA. The SSC comments conclude with the statement "In many respects, the system in place is better than any found around the world". Additional actions taken by the Council in 1998 include: (1) initiation of a requirement for either certified bins or scales in all pollock and yellowfin sole fisheries; (2) initiation of a framework plan to evaluate and improve catch estimation fishery by fishery; and, (3) began a formal process for the SSC to annually review sampling methods and catch estimation procedures.

In summary Madame Chairperson, I do not pretend that our system is perfect by any means, or that there is not room for improvements, whether those improvements originate in the Council arena or in the Congressional arena. Our Council respects the intent of the 1996 amendments and has worked extremely hard to effect that intent. We also stand ready to respond to any new amendments that come out of the pending reauthorization and to provide any input into that process that you require. Again, I appreciate the opportunity to speak to you today on these issues. Thank you.

Senator SNOWE. Thank you very much, Mr. Lauber. The entire text of your statement will be included in the record, and all additional materials.

Dr. Fluharty.

STATEMENT OF DAVID FLUHARTY, PH.D., RESEARCH ASSOCIATE PROFESSOR, SCHOOL OF MARINE AFFAIRS, UNIVERSITY OF WASHINGTON AND MEMBER, NORTH PACIFIC FISHERY MANAGEMENT COUNCIL, WASHINGTON STATE

Dr. FLUHARTY. Thank you, Senator Snowe. I am very happy to be here.

Besides being on the faculty of the University of Washington, I also am a Member of the North Pacific Fishery Management Council. I had the privilege to chair the Ecosystem-Based Principles Fisheries Management Panel, which is part of the SFA. I believe you received our report in March. If you have questions about that, I would be happy to discuss those.

Today, Senator Gorton invited me to try to cover the span of traditional interests of Washington State in fisheries off of Alaska and off our West Coast. These include recreational, commercial and processing interests in fisheries.

Essential fish habitat is obviously an important issue. Our conclusions, after looking at the first iteration, are that we really know remarkably little about the distribution and utilization of habitat by life history stage of the managed species, and of course much less about the non-managed species.

Second, based on what we do know, most of the waters and substrates within 200 nautical miles are essential habitats for some species at some life history stage. That is a fact. It certainly is consistent with what the language has told us to do. It does not mean we cannot refine it.

Concern continues to exist over consultation requirements in the Pacific and North Pacific Council areas, where you have extensive salmon, ESA and Steller sea lion ESA consultations. Those have essentially trumped any of the activities by the National Marine Fisheries Service with respect to consultation. So we do not know really how it is going to work. But I think that, as Ms. Dalton mentioned, it will work in a coordinated way.

But what is really clear to us is that the most important reason for maintaining efforts to further define and refine the essential fish habitat measures, if we do not pay attention to habitat, then other places will be in the same management straits that we are with managing endangered species. We really do need to monitor habitat very carefully, to avoid surprises in the management of our fisheries.

Councils in our region have yet to identify and take comprehensive action concerning fishing effects on fish habitats. However, that should be seen in the context of measures that have already been taken, such as those Chairman Lauber mentioned.

As a component of essential fish habitat, the tool of designating marine reserves for fisheries has long been part of our fishery management, and we expect that it will expand in the future.

As I mentioned, the Ecosystem-Based Fisheries Report has come out. We feel that some of the recommendations can be very helpful in refining the way that essential fish habitat is implemented, particularly the concept of a fisheries ecosystem plan that might be considered.

With respect to overfishing, the North Pacific, as Mr. Lauber mentioned, has been very successful at using an MSY-based TAC since 1977. We feel that careful application of that approach is a key to our success. In the Pacific Fishery Management Council, the biggest issue there is how to manage what has been managed as a species complex of over 60 species of rockfish under the new overfishing definitions. They have been struggling with that mightily.

One of the most difficult parts of the implementation of the overfishing definition is the assessment of all sources of mortality. The Pacific Council is desperately interested in having the option of an observer program, either federally-funded, or by giving the Council authority to levy fees in that region.

Rebuilding plans, we have made significant progress in bringing those into effect. Some of our concerns are technical, relating to the 10-year timeframe. But the important part, we feel, is that we have started and we are moving ahead to rebuild those fisheries.

The North Pacific, as mentioned, has some of the best data on bycatch over the years, through its extensive observer program. In the Pacific Marine Fisheries Council area, they are less known, and therefore we have a significant problem in even estimating progress against the SFA requirements to reduce bycatch. We also have problems that are occasioned by ESA-listed stocks of salmon that require special efforts to monitor and to contain interceptions of the wild stocks for which we are trying to cause recovery.

One of the concerns among the fleets is over the interpretation of minimization of bycatch. The basic feeling is that where it imposes cost over and above the biological and conservation benefits, then it becomes a punitive measure.

There is very strong interest on the West Coast in management measures that will deal with problems of overcapacity. Our efforts to work on license limitation and setting moratoria on new entry in fisheries are insufficient for managing a number of the fisheries. Notably, for example, would be the Bristol Bay red king crab fishery that takes place in the winter. The race for fish there creates some very hazardous conditions that cannot be solved by license limitations alone.

Also the SFA, the ITQ report by the National Research Council, we think, is very beneficial, and provides some information for how to proceed to reduce fishing capacity. Under the American Fisheries Act, which was passed last year, with leadership from members of this committee, a new approach dealing with fishing cooperatives has been set up and has worked the first year. Based on the information we have so far, it has been extremely successful.

Other co-ops are in the process of being formed at the present time. There is a great deal of interest in other sectors of our fishing industry to see how these co-op agreements might work for them. So this is a new and innovative approach that is there.

I would close by stating that with respect to safety requirements, we are still struggling how to implement them. We know that we have some of the worst cases to deal with. We really feel that it is an integrated approach that will be most necessary—one that combines flexible choices among fishermen for effort reduction, with a decrease in the race for fish.

Finally, we would second the recommendations on social and economic information. This is notwithstanding what Senator Stevens said about the excellent information that is gathered in the State of Alaska. We, frankly, in the States of Washington and Oregon, have less well-documented fisheries. Many of the kinds of things that we need—proprietary data, obviously properly taken care of for privacy concerns, are really necessary. In major decisions on inshore or offshore and looking into the "community" national standards, we lack the actual data that we need, both economic and social information.

Thank you.

[The prepared statement of Dr. Fluharty follows:]

PREPARED STATEMENT OF DAVID FLUHARTY, RESEARCH ASSOCIATE PROFESSOR, SCHOOL OF MARINE AFFAIRS, UNIVERSITY OF WASHINGTON

Thank you for the opportunity to testify on the implementation of the Sustainable Fisheries Act (SFA) amendments to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA). I am David Fluharty, Research Associate Professor, School of Marine Affairs, University of Washington and a member of the North Pacific Fishery Management Council from Washington State. I speak in my personal capacity as an analyst (1) and participant in fisheries management, however, in preparation of this testimony, I have consulted with others (2), especially with respect to implementation issues before the Pacific Fishery Management Council. I had the privilege to Chair the National Marine Fisheries Service (NMFS) Ecosystem Principles Advisory Panel requested under the SFA (Section 406 MSFCMA). Our report entitled, "Ecosystem-Based Fishery Management" (3) was delivered to Congress in March 1999. I presently serve on the National Research Council, Ocean Studies Board, Committee on the Evaluation, Design and Monitoring of Marine Reserves and Protected Areas in the United States.

GENERAL CONTEXT FOR SFA IMPLEMENTATION ISSUES

The Sustainable Fisheries Act amendments to the Magnuson-Stevens Fishery Conservation and Management Act were major steps forward toward solving many of the problems in U.S. fisheries management. Congress clarified and strengthened its directives to the NMFS and the Councils to end overfishing, rebuild stocks, reduce bycatch, protect fish habitat, reduce conflict of interest and establish user fees. Congress intended reform. Conservation came first and fishery management was intended to become more precautionary. I believe that fishery management institutions are responding.

In the scant two and a half years since enactment, implementation of the SFA is happening at a pace limited by three factors:

First, is the limit of the capacity of a large fishery management institutional system to make rapid change in a democratic and open process. I believe that NMFS deserves a fair amount of credit for organizing itself for implementation. Within weeks after the passage of the SFA, Councils were given marching orders in letters from the Director, Rolland Schmitten and NOAA General Counsel. Not everything could be accomplished at once. Priorities were established and then reestablished as regulatory processes bogged down. Still, I would argue that as much of what Congress intended was implemented in a short time under the SFA as in 1976 when Federal management for the 200 n.mi. zone was established. Much still remains to be done. Continued support and oversight by Congress is a necessary component of staying the course.

Second, is the limit of the available resources for management. Few tasks were removed from management responsibility by the SFA and enormous tasks were added. Congress did increase funding in later budgets, but, as with all legislative mandates, "Was the increase in budget and employees commensurate with the increase in tasks?" Besides the SFA, other Federal fishery management responsibilities affected the implementation work loads of the Councils and NMFS in the Pacific West Coast. More species of salmon were listed as threatened or endangered under the Endangered Species Act (ESA). Similar ESA issues were raised with respect to Steller sea lions and the Short-tailed albatross. The adequacy of the environmental impact assessment under the National Environmental Policy Act (NEPA) was challenged with respect to groundfish management. Finally, as members of this committee know, the passage of the American Fisheries Act (AFA) 1998, set in mo-

tion extensive reduction in fishing effort and rationalization of pollock fisheries in the North Pacific. Implementation of "sideboard" issues to prevent spillover effects into other fisheries has been a major focus of fishery management.

Third, is the limit of our understanding of the fisheries and their interrelationships with ocean and coastal processes as well as other ecosystem components. This is to be distinguished from the failure to use the scientific knowledge and common sense that we do have available. It is not an excuse for inaction, nor is it a defensible formula for regulatory choices.

Actions that are being taken now may not show results for some time. Like a large ship, turning to a new course is not instantaneous. But the course is set. And the Councils with which I am most familiar, the North Pacific and Pacific Fishery Management Councils, have gotten the message. Much has been accomplished to implement the SFA and this is turning fishery management toward a more sustainable pathway. This should not be forgotten as we continue to implement other parts of the SFA.

SPECIFIC IMPLEMENTATION ISSUES

In the interest of brevity, these issues are presented in a series of short paragraphs without extensive documentation. (4) I would be pleased to answer questions or supply additional documentation as needed. The order of presentation is a focus on the fisheries environment issues and then moving to socio-economic and allocation issues. I have sought to avoid making recommendations for resolving these issues as I understand the Committee's focus for this hearing is on implementation.

ESSENTIAL FISH HABITAT (EHF)

The SFA requires that Councils become much more serious about habitat issues than before. For managed stocks, i.e., those under a fishery management plan (FMP), Councils are to designate essential fish habitat considering all life stages and, through new consultation requirements, manage to reduce impacts from other ocean uses. In addition, Councils were required to consider the effects of fishing on habitat. This latter emphasis is a new focus and one for which Councils and NMFS have the least information and preparation to implement.

NMFS worked extremely hard and quickly to develop regulatory guidelines to implement EHF and to initiate teams at the regional levels to pull together and evaluate information. Some scientific issues were raised about the original guidelines and many of these were resolved. More serious challenges to the guidelines, in concept, came from other potentially affected parties in the mining, forestry, agriculture and water resources management arenas. This delayed the final regulations, but the job did get done. The two important conclusions that I believe came from this effort are: (1) despite, significant long term scientific study, we know remarkably little about distribution and utilization of habitat by life history stage of the managed species [and much less about non-managed species]; and (2) based on what we know, most of the waters and substrates within the 200 n.mi. Exclusive Economic Zone (EEZ) are essential habitats for some species at some life history stage. Some find fault with the definition of essential fish habitat by the Councils as being too encompassing, but I argue, the onus is on them to demonstrate their position given the language of the SFA. Habitat is important for fisheries management.

These results and the documents identifying EFH do several important things. They establish a baseline of knowledge from which to build. This should help to prioritize research. They show the necessity to gain a better understanding of time/space scales in fisheries in order to develop appropriate fishery management approaches that take these factors into account. They point out the iterative nature of the task, i.e., to continually develop and apply better understanding of fish and their habitats. Perhaps most important, is that expanded effort and expenditure of resources on better defining the habitat needs of fish is critical to avoid more serious management issues under the ESA and to avoid "surprises" in the management of fisheries.

Concern continues to exist over the EFH consultation requirements that the SFA advises for all fisheries and requires for anadromous species. To some these requirements are simply redundant to other regulatory processes (NEPA, Fish and Wildlife Coordination Act, ESA, etc.) where fishery management agencies have long held a commenting role. Others consider the requirements impractical and beyond the resources of fishery management if any but the most significant projects affecting habitat are brought forward for consultation. In fact, experience, so far, indicates that the Councils and NMFS in the NE Pacific region have not involved the consultation provisions. NMFS has continued its normal role of commenting in other processes. It has assumed a major role regarding Section 7 consultations with re-

spect to ESA processes for salmonids and the ESA trumps the EFH under such circumstances. Thus, the EFH consultative provisions do not appear to be another layer of bureaucracy. However, this could change if the implementation approach is challenged and that is the worry.

The aspect of implementation of the SFA provisions for EFH that is least complete is for Councils to identify and take actions concerning fishing effects on fish habitats. In the North Pacific and Pacific Council regions, very little study of benthic impacts of fishing has been done. Since passage of the SFA, efforts have increased but the task is almost overwhelming and the resources are undoubtedly inadequate for the task. This failure to take new, comprehensive actions under the SFA requirements, as is being urged in legal actions at present, should be seen in the context of efforts, [some before and after the SFA took effect] to reduce benthic impacts of fishing. In the North Pacific region, more than 15,000 sq. n. mi. in the Bering Sea are closed to bottom trawls to protect red king crab habitats, reduce crab bycatch and to reduce gear conflicts. In the SE Gulf of Alaska a much larger area is closed to bottom trawls. Numerous other fisheries gear closure areas exist. In addition, the requirement to use midwater trawls in the pollock fisheries lessens benthic impacts as well. This is not to argue that the Council's work is done but to remind that we are not starting from a blank slate. In the North Pacific region, work is underway to develop a systematic approach to identification of Habitat Areas of Particular Concern as expected under the EFH guidelines.

ECOSYSTEM-BASED FISHERIES

The National Marine Fisheries Service (NMFS) Ecosystem Principles Advisory Panel established under the SFA (Section 406 MSFCMA) reported to Congress as noted above. The NMFS is in the process of implementing the portions of the recommendations that can be done under existing authorities. The Report makes recommendations to Congress on how to build off of the work done under the SFA (especially EFH) using the concept of a Fishery Ecosystem Plan (FEP). Ecosystem-based fishery management is not a substitute for good fisheries management. The full implementation of the SFA is a prerequisite to the development of ecosystem-based fishery management.

MARINE RESERVES

As noted above, extensive areas have been designated in the North Pacific (4) to control impacts of fisheries on habitat, reduce bycatch and to minimize gear conflicts. The tool of designating marine reserves for fisheries has long been part of fishery management and it is likely that it will be used more in the future. NPFMC is developing a systematic way to evaluate areas for consideration. The PFMC has established a committee to advise it on how marine reserves can be used in fishery management. It expects to initiate actions in the fall of 1999. The National Research Council, Ocean Studies Board, Committee on the Evaluation, Design and Monitoring of Marine Reserves and Protected Areas in the United States has met three times and is hard at work drafting its report [Draft expected by April/May 2000]. This study, sponsored by the NMFS and other agencies, should result in extensive information on use of marine reserves in fishery management and for other purposes. My impression of the West Coast fishery management institutions is that they are actively interested in how to use marine reserves in fishery management. They are keenly aware that such areas must be part of an integrated approach to fishery management. There is considerable concern over the frequently advanced view that large no-take reserves are a substitute for fishery management. Full implementation of the SFA measures will go a long way toward resolving the fishery management failures that critics can so easily point out. Marine fishery reserves should be employed for fishery management purposes where they are the most effective and reliable approach to achieving the goals and objectives defined. [There are, of course, other marine management goals and objectives that can be served by marine reserves].

OVERFISHING

Probably the most fundamental shift in the SFA was the requirement that MSY not be exceeded for any reason. While this seems like it should be an obvious tenet of fisheries management, Councils and NMFS were permitted to exceed MSY for socio-economic and other reasons in the earlier versions of the MFCMA. The new overfishing definition had to be worked out and placed in regulations. This delayed somewhat, its application in TAC setting until 1999. The new definition clarifies that all sources of fisheries mortality (including bycatch, discards, and estimates of unobserved mortality) should be counted against the Total Allowable Catch cal-

culated around MSY. Fishery science has long regarded MSY as a crude measure and one that is not necessarily conservative because of its focus on "maximum" yields as opposed to long term sustainable yields. The regulatory definition goes quite far to incorporate more modern fishery reference points than straight MSY but the question remains as to how conservative it is and how useful it is to apply universally.

In the NPFMC area, conservative TACs have been set since 1977 so the new definition continues existing practices. The one species that falls under the new overfished definition is a species of crab for which the directed fishery has been closed for several years. Some discussion exists that there may be a need to examine how appropriate MSY is for management of crab species where recruitment and survival appear quite sensitive to ocean regimes as well as fishing pressure. This is a technical issue that can be resolved by stock assessment biologists given sufficient flexibility in the interpretation of the law.

For the PMFC the biggest issue in this respect has been how to implement the overfishing definition on its multi-species rockfish fisheries (nearly 60 species previously managed as a species complex). The overfishing definition applies to species and not to species complexes. Thus, there has been a major effort to work out scientifically how to implement the regulations and the species-by-species approach has radically reduced the TACs and fishing patterns have been altered. One of the most difficult parts for implementation is the assessment of direct and estimation of non-direct mortalities where there is not an observer program to gather reliable data across the fleet. PMFC is desperately aware of this problem and is working with members of this Committee to resolve it. There are further complications in managing this fishery because of the difficulty of using trip limits to accomplish management objectives. This appears to result in high regulatory discards and possibly in high grading of catches.

REBUILDING PLANS

Implementation of rebuilding plans is necessarily downstream of determination if a fish stock is overfished. Thus, rebuilding plans on the West Coast are lagging behind the SFA mandated schedule in terms of implementation. Significant progress has been made and these plans will go into effect in the near future. SFA has set in motion the kinds of actions intended to reverse downward trends in some fish stocks. For some species, results cannot be expected to be seen within a 10-year time period due to the long life spans and slow recruitment into the fisheries (e.g., rockfish). For species dependent on special environmental conditions beyond the control of management, a similar problem exists with the specification that the plan causes recovery within 10 years. The most important effect of this provision of the SFA is that it forces Councils and the NMFS to focus on rebuilding the stocks once overfished.

BYCATCH

With the addition of a new National Standard, SFA requires Councils and the NMFS to "minimize" bycatch to the extent practicable, and, with respect to the NPFMC, sets a requirement for successive reduction of bycatch annually over a period of 4 years. NPFMC probably has some of the best data on bycatch over the years because of its extensive observer program. These bycatch amounts have been counted against the TAC for a considerable period of time and relatively little biological impact is attributed to it by the Plan Development Teams and by the Scientific and Statistical Committee of the Council. Bycatch of prohibited species (mostly high value species caught in other fisheries like salmon, herring, halibut) is closely monitored and, in some cases, this has led to a closure of a fishery before the TAC of the target species was caught. Thus, there has been a responsible management of bycatch to avoid conservation and economic concerns in the NPFMC area. To the extent that "minimization" of bycatch imposes costs over and above the biological benefits, it becomes a punitive measure in the eyes of the fishing fleets. Reducing bycatch commensurate to biological, conservation and economic realities is seen as a reasonable approach whereas minimization for the sake of minimization is not. It all boils down to the interpretation of "to the extent practicable".

NPFMC has reduced its total bycatch by approximately 50 percent in on set of management actions taken just prior to the SFA amendments but implemented after the SFA. It required that all non-prohibited species of bycatch be retained and utilized under its Improved Retention/Improved Utilization amendments to the groundfish FMP for cod and pollock. Some objected to this being considered as bycatch reduction and instead, called it a sleight of hand because the same fish were caught but simply re-categorized as utilized. The difference was that they were no

longer discarded. This points to the conflict among fishery management objectives that promote utilization and those that call for minimizing bycatch. A common sense approach is needed to ensure that where there is not a discernible biological or conservation impact, utilization would seem a more important objective than bycatch reduction. To further complicate matters, some insist that utilization of fish for purposes other than human consumption is inappropriate even if profitable. Again, a common sense clarification is necessary along with what is outlined above.

Further actions by the NPFMC have aimed at reducing bycatch but these have not been as dramatic in effect as the earlier measures. They have probably resulted in a reduction in bycatch in each of the subsequent years but it is difficult to track completely. This points to the need for flexible options for bycatch reductions, rather than a target schedule, as effective ways to reduce bycatch. In the same amendment that produced large reduction in bycatch in pollock and cod fisheries, NPFMC adopted the goal of IR/IU for yellowfin sole and rock sole in 5 years from date of approval to allow the industry to adapt gear and equipment to accommodate the acknowledged changes that would be necessary.

In the PFMC region bycatch amounts are less well known because of the lack of an observer program over the full range of fisheries. To be certain, some management measures like trip limits and regulatory discards from them, make implementation difficult. Problems with interceptions of ESA listed salmon runs and a general management concerns over other depleted stocks have led to greater efforts to restrict time and fishing areas to those with the least interceptions and/or highest degree of catch of hatchery fish. This has had major impacts on all salmon fisheries but especially on coastal charter fisheries and commercial troll fisheries.

I am convinced that a necessary component of bycatch reduction measures is bycatch allocation and monitoring at the vessel level. NPFMC efforts from its Vessel Incentive Program (VIP) demonstrate this. Effective use of such a measure at the vessel level is complicated by due process limitations and by concerns that such allocations represent individual quotas not allowed under the SFA moratorium on IFQs.

REDUCING OVERCAPACITY

The SFA and concomitant measures under ESA for salmon have resulted in some buyback programs for fisheries in economic crisis in the PFMC region. Obviously, the long term goal is to have healthy fisheries and fishing industries. The SFA measures discussed above are setting the stage for that scenario.

One of the keys to successful implementation of fisheries management measures is providing the right kinds of incentives to fishermen to do what is needed. When the fishing industry can see the justification for and reap the benefits of management measures, they can more readily accept additional costs to achieve them. If the benefits are not spread too thinly, fishing interests are much more likely to be able to afford the sometimes costly measures required to achieve management goals. On the West Coast, fishery managers and fishing interests are eager to embrace a variety of programs that would reduce the amount of fishing capacity. In this regard, the SFA provides for the use of industry-funded buyback programs. However, the Federal regulations for this approach are yet not approved, despite pleas from some segments of the fishing industry and interventions by some members of this Committee. This delay in developing regulations has impeded industry actions to develop such programs.

The SFA moratorium on IFQ programs has set back Council development of IFQ plans in several cases on the West Coast. Because of its concerns about the use of IFQ programs, Congress requested that the National Research Council report on use of IFQs in fisheries management. That report was released earlier this year. It finds that IFQs and similar measures should be in the fishery management toolbox for use where they are determined to be appropriate at the regional level, and where they are properly conditioned to avoid mistakes and unintended consequences of some previous efforts. This sparks interest in reviving in that mechanism.

Since passage of the SFA, fishery management Councils have continued efforts to limit access to the fisheries through moratoria on new entry and through license limitation programs. While these measures are important in and of themselves, they do not address the underlying issue of too much active and latent capacity in the fishing fleet. For some fisheries, like Bristol Bay red king crab, the race for fish under very hazardous conditions cannot be solved by license limitation alone. Management problems, too, are considerable in such a short duration, high intensity fishery. It is my impression that market-based choices by fishing entities to exit or remain in a fishery relieve the Councils of this onerous task and are more likely to be viewed as fair than any formula that might be designed by a Council process.

These choices are served by a variety of effort limitation mechanisms, including industry-funded buyback programs, IFQs, etc.

Since the passage of the SFA, one of the most innovative developments in capacity reduction is the formation of a Pacific whiting fishing cooperative that significantly reduces the number of vessels competing for a specific allocation of the Pacific whiting catch in the Pacific region. In 1998, a similar cooperative approach was enabled through passage of the American Fisheries Act (AFA) with leadership by members of the Committee. Already pollock fisheries cooperatives have formed among the at-sea processors and the catcher vessels delivering fish to them. Similar efforts are underway for catcher vessels delivering to onshore processors as one of the alternatives allowed by the AFA. The cooperative approach is being observed favorably by other fishing sectors and it is likely that other efforts will be made to form them. The benefits of increased recovery rates, reduced bycatch and increased ability to produce high value products, as opposed to high volume products, appear to be realized. The environmental costs of operating redundant fishing capacity, the ending of the "Olympic-style" competitive race for fish, the losses to net economic benefits, and the social benefits of more stable fishing opportunities at increased returns all point in the right direction from the cooperative approach.

NATIONAL STANDARD FOR SAFETY

Two new national standards were promulgated under the SFA—for bycatch (discussed above) and for fishing safety. With respect to the national standard for fishing safety, it does not appear that significant changes are being made to implement it in FMPs. The willingness of fishing entities to take risks seems highly correlated with the economic incentives to race for fish in high value, low volume, short duration fisheries. Management measures that allow more flexibility in choices of when and how to fish without competing for a share of the fish, seem most favored by the participants in such fisheries. Market-based and cooperative mechanisms are likely to develop the innovations to vastly improve decision making with respect to risk. In addition, fishing operations that are profitable are able to maintain vessel systems and retain qualified crew members—all of which contribute to but do not guarantee safety of fishing.

NATIONAL STANDARD DEFINITION OF FISHING COMMUNITIES AND SOCIO-ECONOMIC INFORMATION

One of the realizations of efforts to implement the fishing community definition was that socio-economic data gathered by states are woefully inadequate for fishery council deliberations. Almost no socio-economic data is collected on fishing entities (despite willingness of industry to provide them) that is sufficient for management decisions. This means that even qualitative judgments are hard to make. Implementation of a scientifically sound policy with respect to fishing communities requires a significant new effort to obtain them on a routine basis and this implies a need for budgetary support.

OTHER ISSUES

Two issues of particular concern for West Coast fisheries are the development of an observer program and the continuation State management authority for Dungeness crab in Federal waters off Washington. Whether the observer program is based on fees collected from the fleet or general appropriation is a matter to be decided, as well. Without an observer program it is nearly impossible to make measurable progress toward bycatch reduction or the monitoring of discards or high-grading. The ability of the State to continue to manage Dungeness crab in Federal waters is particularly important given its co-management agreements with Native American tribes under Treaty obligations. This option has been implemented quite successfully under the SFA and makes the management approach inside State waters and in Federal waters a more coherent and consistent one.

In the SFA, there were a variety of other reports on such things as lien registries for fishing vessels and reduction of subsidies in fishery management. Based on anecdotal reports these studies are progressing but not yet complete. These reports are needed links in developing more innovative and sustainable fisheries under the SFA.

NOTES

1. See, for example, Fluharty, David. 1996. "Magnuson Fishery Conservation and Management Act Reauthorization and Fishery Management Needs in the North Pa-

cific Region." Tulane Environmental Law Journal. Vol. 9:2 Summer 1996. Pp. 301–328.

2. Preparation of this statement included discussions with a number of people in the "Council families" of the North Pacific Fishery Management Council and the Pacific Fishery Management Council. NPFMC: Rick Lauber, Chairman; Clarence Pautzke, Executive Director; Dennis Austin, Council Member, Washington Department of Fisheries and Wildlife (WDFW); Wally Pereyra, Council Member; Arni Thomsen, Alaska Crab Coalition; Paul MacGregor, Jim Gilmore, Trevor McCabe, At-Sea Processors Association; Tom Casey, Alaska Fisheries Conservation Group. PMFC: Larry Six, Executive Director; Phil Anderson, Council Member WDFW; Bob Alverson, North Pacific Vessel Owners Association and Council Member; Rob Zuanich, Purse Seine Vessel Owners Association. The press of time did not allow for contact with processors, tribes, and many other interests.

3. http://www.nmfs.gov.sfa/reports.html

4. This presentation is coordinated with that of Rick Lauber, Chairman, NPFMC in order to avoid repetition. Materials supporting his presentation are incorporated by referenced herein as well.

Senator SNOWE. Obviously that is an issue that has been raised consistently by many of the witnesses here today and in my discussions with others in the industry. What should we do in this reauthorization process to ensure that the essential data is collected and is done in order for the councils to make the best decisions possible? I know that you have mentioned it. Mr. Hill has mentioned it. We have had others. How recent should that data be? Because Mr. Hill said I think that it is as old as 1 year to 15 months. How updated should that information, how recent, can it be and should it be?

Dr. FLUHARTY. Senator Snowe, I think the best recommendation, the most telling that I have seen and I think where the most work is being done, comes out of the council chair recommendations to this committee. I think Mr. Lauber has appended those to his remarks. So, in terms of the detail, I think there is a committee of the councils that is working on sort of a more uniform approach that would perhaps provide that kind of information.

But it really gets at who is doing what, when. One of the problems that we have is obviously the time lag in obtaining these data. So I do not know that we are going to be able to get them in any real-time sense. That, coupled with the problems of dealing with the changing fisheries is another problem. So that much of our data base is out of date relative to the way that the fisheries are being prosecuted, say, in 1999 compared with 1998.

So there are a number of data problem areas that we probably will not be able to overcome. But getting a time series about social and economic information that is similar to what we have for biological data on fisheries is, I guess, the simplest way that I know to express what we need.

Senator SNOWE. Mr. Lauber.

Mr. LAUBER. Senator, I have been a chairman for a number of years, and therefore have been somewhat involved with and talked to a number of other council members and chairmen from other areas. Everything, of course, that Dr. Fluharty says is correct. We always can use better and we can use more timely information. But I have the feeling that the North Pacific Council has always had better data than many of the councils, if not most or all of the other councils. More recently, because of our observer programs, we have had a lot better data on bycatch, discards, waste, that type

of thing, better catch estimates in the round, before they were processed, that type of thing.

Now, we may suffer from some of the same problems that other councils have on social and economic data, but even there I think we have gone a long way, because some pressing issues that we have had have caused us to collect through other means, private sources, whatever, contracts, some of that data, on a case-by-case basis. But probably the reporting system and the observer program have made it much easier for us than a lot of the councils are experiencing, because they just do not have access. In many cases, they do not really know how much is even being caught. Certainly they do not know how much is being discarded.

Senator SNOWE. Has that been a decision that has been made unilaterally by the North Pacific Council with respect to the observer program?

Mr. LAUBER. Yes. The original observer program was by us. The one in existence today is strictly a North Pacific observer program and is totally funded by the industry. We actually, a few years ago, had an amendment to the Magnuson Act then that called it the North Pacific Research Plan. Quite frankly, we called it that because, to some areas of the United States, observers were such a bad word that we did not want to use the word "observers" when we put it into effect. When it became law, we have not implemented under that law for various reasons of no concern to this meeting. But we put in our own observer program many years ago. To us, it seemed like a logical thing to do.

Now, I do not mean to say that every single vessel that take every catch is observed. Very briefly, all vessels over 125 feet are observed. Those 125 feet to 160 feet have 30 percent observer coverage. This gives us a wealth of information.

In the CDQ fishery, we have two observers on each vessel.

In the new American Fisheries Act, on factory trawlers, there will be two observers aboard each vessel. So we have a pretty extensive observer program.

Senator SNOWE. Do you think that is the most effective means of gathering information?

Mr. LAUBER. Well, yes, it is. Of course, you do not rely just upon the observer program, as well. We have other things that supplement that. But one of the things that we have found is that the observer program collects the data, but the more important thing is that it gives a degree of confidence to not only the council, but to other fisheries that are involved that the bycatch numbers are in fact correct or close to being correct. They still quibble or think somebody is pulling shenanigans, of course. You know how fishermen would be. But for management purposes at least, the data is very good data.

Senator SNOWE. Plus, it involves the fishermen themselves. They are involved. It gives them more confidence in the outcome.

Mr. LAUBER. Yes.

Senator SNOWE. I guess it is as recent as you can get, because they had a chance to observe onboard what is happening.

Mr. LAUBER. Well, we do not have instantaneous data. We are working toward that. Senator Stevens made some reference to data reporting and the problem. This is a unique problem, obviously, in

Alaska, where the National Marine Fisheries Service is preempting the State program. I think that Senator Stevens is correct in that.

Senator SNOWE. I do not know if that would go over well.

Mr. LAUBER. That needs to be looked into. I have a sneaking suspicion that since the Senator brought it up, it will be looked into.

Senator SNOWE. Right. That would not go over well in Maine, I can assure you.

Mr. Hill and Ms. Raymond.

Mr. HILL. Thank you, Senator.

Just a couple of brief points. In my written testimony, there are several sections of the Act that exclude the opportunity of the councils or the National Marine Fisheries Service from collecting data from processors and proprietary information. It would seem to me if that data is handled in an appropriate manner, it would be helpful for the councils and the Service would be able to have access to that in order to make these decisions.

I think also it is critical to point out that the kind of data that is necessary to make the kind of social assessments that you are talking about, that you have raised during your comments, it is fairly finite. The difference between Portland, Maine, and Gloucester is fairly significant in terms of the impacts. It would be helpful to have a time series of data between gear sectors, vessel sizes, communities themselves where the fish is landed.

When we go to try and make allocation decisions or when we are trying to make decisions of the reduction of mortality and how that is fairly attributed to the different participants within the fishery, the kind of data we are talking about, at least lends an air and a sense of credibility to the decisions that are made. When they are made in a vacuum of—I will not call it ignorance, but when the data is really weak, it leads to very strong suspicions that they are inappropriate transfers of opportunity and/or transfers of responsibility.

I think it breeds distrust in our process, to a degree. Anything we can do to strengthen that I think would strengthen our ability to be viewed as being evenhanded and straightforward during our deliberations.

Senator SNOWE. So what approach should be taken in this reauthorization with respect to that issue? Is it money?

Mr. HILL. Well, I would make the observation that an observer program funded by the industry is very appropriate in a fishery where the fishery is very healthy. I think the problem has been, in New England, where we have had very depressed stocks, boat owners cannot even afford to take care of their boats. The thought of levying fees on them during a time of great distress is not politically tenable.

So my view is that a nationally-funded observer program, focused on fisheries that are having difficulties, I think would be very helpful. The time series that I spoke about earlier in my testimony, relative to the year to 15 months was related to biological information. We need to do better on that. The social and economic data, in my opinion, is extraordinarily weak and/or does not exist at all in many instances.

Senator SNOWE. Ms. Raymond.

Ms. RAYMOND. Senator Snowe, I just want to emphasize the need for collecting more accurate and timely social and economic data. At the beginning of this hearing, both Senator Kerry and Assistant Secretary Garcia quoted some numbers about the numbers of people who are employed throughout the country and the value of those fisheries.

Just because they both said the same number, I hope you do realize that those are just gross estimates. We really do not have any kind of information about what the value of these fisheries are. In our own State, this information is very lacking. We cannot call the Department of Labor and ask how many people are employed in fishing, and we cannot call the planning office. Nobody knows these figures.

I think the problem can be partially solved at the State level by an emphasis on the States in collecting some of this data, to make it available. But certainly it should be a high-priority issue.

Senator SNOWE. Can I ask you a follow-up on the announcement that Mr. Garcia mentioned with respect to the groundfish industry and the 100-pound trip limit? What is your reaction to that and the revisions on the running clock? Do you think it will still end up with major discards of cod?

Ms. RAYMOND. Yes, I do, Senator. Again, the numbers, as you said, were all over the map. The numbers have changed daily.

I guess I am glad that the number is going up, from 30 to 100. But what I am most disappointed at is that the decision does not include any recommendations to compensate for those changes and to compensate for the loss that has already occurred to the status of the resource because of this continuing discard that has gone on for 2 months. The council and the Service debated several plans on what to do.

Everybody knew what to do, but nobody wanted to do it. When the council threw up its hands and gave the emergency action request to the Secretary, that literally gave the Secretary the power to do anything he wanted to do. He knew what to do, Senator, and I submit that he did not do it.

Mr. HILL. Could I just make a quick observation?

Senator SNOWE. Yes.

Mr. HILL. As a part of my testimony, my point about having specific mortality targets, TAC's, that the councils are required to meet under their obligations of the administration of the Act, would have prevented the kind of issues that we are dealing with now. That it is by the overages that we have spent the money in the bank, so to speak, for 3 or 4 years in a row that led us to the consequences of this recent implementation of the trip limit.

Senator SNOWE. Because it was a failure of the information that you had at hand, although I think we all expressed deep concerns about the direction the council was likely to take on this issue that would result in what happened.

Mr. HILL. Personally, I do not think it was a failure to understand—well, there were several failures—and one of them was that we did not have as good a data on a timely basis about what landings were occurring. But I think, more specifically, the council was reluctant, and has been reluctant, to implement specific mortality

controls that would ensure that we did not exceed our target TAC's.

The reason for that has been the potential adverse social and economic consequences of having hard TAC's, because they have undesirable consequences, as well. Unfortunately, the consequences of exceeding the TAC on an annual basis for several years, we have stripped away the principal in the bank and we are now paying that price. The choice we made in January relative to the trip limit—I can honestly say I did not vote for it—but it was a choice between competing possibilities.

The choice that was made was made, I think, in good faith. In the subsequent fishery, there was a big movement of fish into the inshore bottom from, I believe, Georges Bank. We had a fairly significant movement of fish that caused discards far in excess of anything that anybody anticipated when we were drafting that regulation.

Thank you.

Senator SNOWE. Well, in rebuilding schedules for depleted stocks, do you think that socioeconomic impacts should be considered?

Mr. HILL. I have been told that Senators ask hard questions when you come here. You just confirmed that. [Laughter.]

Mr. HILL. I will do my best to answer that. I believe, Senator—and it is my point earlier about having probably a minority view on my council in some respects, or at least I am not in the majority, I would suspect—I honestly believe, Senator if we rebuild fisheries, we will provide the industry with the social and economic benefits that they need in order to be able to be fully self-sufficient in the fishery.

My opinion is that the council has attempted to ameliorate those social and economic consequences for about 7 or 8 years. That the measures that we have taken, the incremental steps that we have taken, in my opinion, were an attempt to avoid the social and economic consequences and not alter the fabric of the fishing communities that we regulate.

My opinion is that in fisheries management, dramatic action, particularly in an overfished stock, dramatic action, the closure of Georges Bank, significant reductions in mortality by either TAC or reductions in days at sea, are far more effective, far more likely to lead to success, than incremental measures that seek to avoid those social costs. I do not want to dismiss the consequences of those social costs, but I believe it is beyond the ability of the council, quite frankly, to wrestle with them sometimes.

When you are in a depressed fishery that is significantly overfished, any measure that you take has consequences. The visceral and contentious arguments about who should bear that cost, the council is the recipient of those arguments.

Oftentimes the council errs on the side of caution in trying to protect the industry from the consequences. In my opinion, we have prolonged the cost, we have prolonged the impacts that might have been borne by the industry by our attempting to address those very consequences.

That is my own opinion. I think it has been borne out by history. How we address the social consequences I put in my written testimony, it is the fundamental question. We are required, under Na-

tional Standard 1 to rebuild these fisheries. We have been given a timeframe. In any reasonable timeframe, the rebuilding of these stocks have consequences to the participants in the fishery. I, quite, frankly, do not have a good solution to dealing with those consequences. I believe that is beyond the council's ability. But I believe that if we rebuild these stocks, we will enjoy the benefits that the industry is looking for.

I would submit that the closure of Georges Bank was probably the most contentious fisheries management measure that has been taken probably in New England ever. It is now viewed as a major success. It is touted by many of the industry now, today, as a sacrifice that they made that has provided significant benefits. But at the time, it was widely hated. It was—there are not enough proper adjectives to describe their views. [Laughter.]

Senator SNOWE. Thank you.

Ms. RAYMOND. It was, however, supported by the Groundfish Group of Associated Fisheries. [Laughter.]

Senator SNOWE. Yes. Mr. Lauber, what do you think?

Mr. LAUBER. We do not have to deal with Georges Bank. [Laughter.]

Not to say that we do not have contentious issues. I do not know how other councils operate. All I can tell you is that this system that Congress put together, they were either very, very smart or they were very, very lucky, or maybe a little bit of both.

Senator SNOWE. That is the first time we have ever been described that way. [Laughter.]

Mr. LAUBER. Because it has the elements of a very, very good system. Because the council system, if it does its job—and let us say, as anything composed of individuals, most of the time it does its job most of the time. This is grade A to the Secretary and the Department of Commerce and the National Marine Fisheries Service, of course. But the councils are only advisory in nature. Therefore, there is a stopgap. There is a checks and balances. So that if the council does not do what it should be doing, the agency can step in, the Secretary can step in with secretarial plans and so forth.

Fortunately, most times the Secretary does not feel that that should be done. But I think that, like in any system, everybody has to do their job. If for some reason some council, sometime, is not doing what it should, then I think it is up to the agency, the Secretary, to step in and they have a responsibility, as well. It is difficult to make some of these decisions when you have people that you are putting out of business. There are human beings that are appearing before you. But we have a mandate.

So far—knock on wood—but we do not have any fisheries in the State of Alaska that are in an overfished state that are under our jurisdiction, that we are managing. That has not been easy. We have set some serious limits on fisheries, shut fisheries down—maybe not as dramatic as Georges Bank, but we have shut fisheries down and people have been impacted negatively, seriously. It just has to be done. The end result is that we do not have these fisheries disasters.

Now, that does not mean that environmental conditions and so forth are not going to create problems, but at least they will not be our management problems.

Senator SNOWE. Can you tell me, should this be a 4-year authorization? Should it be longer? Should it be shorter?

Any thoughts on that?

Mr. LAUBER. Well, I submitted as part of my testimony, and I am sure maybe others will, the council chairman's comments. Many of those I would put more in the housekeeping category. At the North Pacific Council, we have had this on our agenda several times, as to amendments. Quite frankly, I do not know whether we are so busy working on the American Fisheries Act and our problems with Steller sea lions and attempting to implement the amendments that you gave us in 1996, that we really are not asking you to do an awful lot, because we have got enough to do.

So, I do not know, the year does not make much difference to us. We do not have any burning issues in the North Pacific, that I am aware of, that we are asking you to amend.

Senator SNOWE. Yes, it gives us an opportunity, I think 4 years, thinking about it. Although it may be that we will not be required to make some significant changes, as did occur in 1996. But, nevertheless, it gives you an opportunity to conduct oversight and review in the event that there are problems. If it goes much longer, then it makes it much difficult, particularly if there are issues that warrant the attention of Congress.

Mr. LAUBER. I think that was the way your staff suggested that I concentrate on commenting on the 1996 amendments and our problems, if any, in implementing those and how we have done. In following that suggestions, that is what I did.

Senator SNOWE. Dr. Fluharty, do you have any comments?

Dr. FLUHARTY. I think it is important to recognize that, as has been pointed out, we have not fully implemented the 1996 Act. Even where we have, we may not have done a good enough job in various councils. So I think it is really important for Congress to stay the course on that and keep the pressure on.

I do think that there are some specific issues, regionally and perhaps nationally, that will come to the fore through this process that can be useful. One of these is certainly the question of authorization for observers, observer-type programs, and the ability of councils to develop those at their discretion. Specifically, in the Pacific Council area, the need to maintain management authority over Dungeness crab by the State of Washington permits it to better fulfill its responsibilities under treaty obligations.

Senator SNOWE. One other question on the essential fish habitat. Obviously that is of serious concern to many and obviously to the stakeholders. Some have said that the councils have had difficulty in distinguishing between essential and nonessential habitat. Do you have any comments on that?

Dr. FLUHARTY. I think that the answer that the councils have given in the first iteration is that habitat is essential, and lots of it.

Senator SNOWE. Can you make that narrower, like the NMFS is talking about, or is that possible? I guess it was Senator Gorton

saying they did the whole State of Washington, designating the entire State of Washington.

Dr. FLUHARTY. Right. But that is a function of the way that the law was written and I think correctly interpreted. It does not mean that every area is going to be subject to a significant determination for every activity. I think that the approach taken so far is going to be a successful way to implement it. But I can understand why some people are worried.

I think the habitat areas of particular concern (HAPC under the SFA) approach which is being implemented in some areas, is an important part of the SFA. But it still does not solve all problems. There are many scientific discussions about how you define essential habitat. Here Congress has said, look at your managed fisheries and tell us what they need. Another approach is to look at the habitat and say, which of these areas are particularly important for groups of species?

Right now we have dis-aggregated approach to defining Essential Fish Habitent. With something like the Fisheries Ecosystem Plan (FEP) Proposal that we have submitted through the Ecosystem-Based Fisheries Management Panel, it provides a vehicle to start aggregating, to start looking at the way that these processes and functions, i.e., the way the ecosystem functions. So I think that there are some leads here as to how to narrow that down, how to make them a more useful approach for fisheries management.

Senator SNOWE. Mr. Hill.

Mr. HILL. Madam Chairman, I would just bring to your attention the New England Council has implemented that section of the Act in a very similar way. Because of the life stages of all of the different species that are under our jurisdiction covers almost every area of the Gulf of Maine. But I think Dr. Rosenberg accurately—what I would call—clarified the council's approach to areas of critical concern.

Those are areas where they are unique in nature, have either very high spawning activity or are used in a variety of life stages. Our council is being very cautious but very deliberate about determining. There has only been one so far, and we are looking at a couple of others.

So my view is that all of the marine environment is critical habitat. The question is, how much of it deserves special attention from a regulatory standpoint? Thank you.

Senator SNOWE. I want to thank all of you very much for your very thoughtful information here today and your testimony. It is going to be very helpful to us as we pursue this process over this next year. I thank you for taking the time, for traveling long distances, to be here today and to spend so much time with the committee. We certainly appreciate your insight and your testimony and your thoughtfulness here today. Thank you.

OK, we are down to the last panel. I apologize that it has taken so long today. Now, we will proceed with our third panel of distinguished witnesses. You may step forward.

I would like to welcome Mr. Wayne Swingle, from Tampa, FL. Mr. Swingle is executive director of the Gulf of Mexico Fishery Management Council.

The next witness is Mr. Glenn Delaney. Mr. Delaney serves as the U.S. Commissioner on the International Commission for Conservation of Atlantic Tuna.

Our final witness will be Mr. Ken Hinman, the co-chair of the Marine Fish Conservation Network.

I thank you and I welcome you for being here today. Again, I apologize for the length of this hearing, but we got set back by those votes earlier today. But I really appreciate you being here today to share your thoughts with the committee.

Mr. Swingle, we will begin with you.

STATEMENT OF WAYNE E. SWINGLE, EXECUTIVE DIRECTOR, GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

Mr. SWINGLE. Madam Chairman, I greatly appreciate the opportunity to appear before you and present the councils' progress in implementing the provisions of the Sustainable Fisheries Act and to provide the council's recommendations for amendments to the Magnuson Act.

First, let me briefly acquaint you with the status of our stocks under the Sustainable Fisheries Act. We manage the shrimp, spiny lobster and stone crab, none of which are overfished or have been. The shrimp fishery is probably the Nation's most valuable, having contributed about $2.9 billion to the gross national product in 1989, and certainly more than that at this date.

We protect the coral and coral reef resources and manage three finfish fisheries. Our reef fish fishery consists of snappers and groupers and results in landings of about 30 million pounds annually. Red snapper are classified as overfished. We have been rebuilding this stock since 1990. With the new standards, this task will extend well into the next century. Gag grouper was recently classified as approaching an overfished state, and the council recently took action to reduce fishing mortality that should alleviate that condition.

We also manage species such as mackerels, cobia and dolphin, of which only the Gulf king mackerel and Spanish mackerels have been classified as overfished. We began the rebuilding programs for those stocks in 1985, and have completely restored Spanish mackerel and nearly restored the king mackerel. We also manage red drum, which is a major recreational fishery in our area. This stock would have been restored by the year 2001, but will take longer under the new Sustainable Fisheries Act overfishing criteria.

In complying with the Sustainable Fisheries Act, we developed two generic amendments. The first of these was an amendment that identified and described essential fish habitat for the life stages of the stocks. The National Marine Fisheries Service partially disapproved that amendment because we depicted the life history stages and their distributions for only 26 dominant stocks. The distribution information for the minor stocks was not available to us, so that was not included. The amendment is currently under litigation, filed by the Florida Wildlife Federation.

The second amendment addressed bycatch, overfishing criteria, rebuilding periods, and fishing communities. Prior to the completion of this document, we implemented an amendment to our shrimp plan for the Central and Western Gulf that reduced bycatch

by requiring bycatch reduction devices in the trawls. An amendment addressing the shrimp trawl bycatch for the Eastern Gulf is currently being prepared. Therefore, our Sustainable Fisheries Act amendment only described the bycatch in other fisheries, most of which was regulatory discards.

In the section on overfishing criteria, the council acted conservatively by increasing our overfishing standard from 20 percent spawning potential ratio to about 30 percent, to assure the stocks are managed at or above MSY. The effect of these new standards, however, will be that additional stocks will be classified as overfished and will require amendments to rebuild those stocks.

In gathering the U.S. census data and other information to characterize fishing communities, we found that most of these data are inadequate for that purpose, and certainly inadequate to assess the impacts of management measures on communities. We did suggest, in an attachment to this testimony to Secretary Daley, actions that could be taken to make the census data more useful.

As you can see, the increased workload for the councils from the Sustainable Fisheries Act will carry over into the next several fiscal years. However, we would like to point out the administration proposed to increase the fiscal year 2000 allocation for the eight councils by only 2.3 percent, which will be inadequate to carry out that mandate.

I have appended the council's recommendations for amendments to the Magnuson Act to this testimony. I thank you for this opportunity to testify.

[The prepared statement and information of Mr. Swingle follows:]

PREPARED STATEMENT OF WAYNE E. SWINGLE, EXECUTIVE DIRECTOR, GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

Madame Chairman and members of the Committee, I greatly appreciate the opportunity to appear before you to present the Council's progress in implementing the provisions of the Sustainable Fisheries Act (SFA), and to provide you with the Council's recommendations for amendments to the Magnuson-Stevens Act (MSA).

First, let me briefly acquaint you with the fisheries we manage, and the status of those stocks under the SFA. The crustacean fisheries we manage include shrimp, spiny lobster, and stone crab, none of which are overfished or have ever been. The Gulf shrimp fishery is the nation's most valuable fishery, having contributed 2.9 billion dollars to the GNP in 1989, and certainly more than that now.

We also preserve and protect the corals and coral reef resources and manage three finfish fisheries. Our reef fish fishery consists of more than 40 stocks of snappers, groupers, and related species and results in landings by recreational and commercial fisherman of about 30 million pounds annually. Red snapper is the principal snapper species and is classified as overfished. We have been rebuilding this stock since 1990, but with the new SFA standards, this task will extend well into the next century. Gag, a major grouper stock, was recently classified as approaching an overfished state. The Council took action within the last 2 weeks to reduce fishing mortality by about 17 percent, which should alleviate that condition. We have also prohibited harvest and possession of two other minor reef fish stocks (Jewfish and Nassau grouper) that were classified as overfished in the early 1990's.

We also manage the fishery for coastal migratory pelagics species, such as mackerels, cobia, dolphin, etc. In this species complex only Gulf king and Spanish mackerels have been classified as overfished. We began the rebuilding program for these stocks in 1985 and have completely restored the Spanish mackerel stock and have nearly restored King mackerel. We also manage Red drum, which is a major recreational fishery in all our states. This stock would have been restored by 2001 under the current overfishing criteria, but it will take longer under the new SFA criteria.

In complying with the SFA, we developed two generic amendments that addressed those issues for our seven fishery management plans (FMPs). The first of these was an amendment that identified and described essential fish habitat (EFH) for the estuarine and marine life stages of the stocks in our FMPs. The amendment also discussed threats to EFH and management measures for enhancing EFH. NMFS partially disapproved the amendment, largely because we had diagrams depicting the estuarine and marine life stage distributions for only the 26 dominant stocks, rather than for all of them (Attachment 1). This distribution information for the minor stocks was not included because it was not available (Attachment 2). This amendment is currently under litigation filed by the Florida Wildlife Federation with the allegation that it does not comply with the SFA because it does not include management measures reducing the impact of gear on EFH.

The second generic amendment principally addressed bycatch, overfishing criteria, rebuilding periods, and fishing communities. This amendment has not yet been considered for approval by NMFS. Prior to completion of this document an amendment to our Shrimp FMP was implemented (May 1998) that reduces bycatch in that fishery by requiring shrimp vessels fishing the Gulf, off the Florida panhandle west to the Mexican border, to install bycatch reduction devices (BRDs) in the trawls. An amendment addressing shrimp trawl bycatch for the eastern Gulf is being prepared. Therefore, the generic amendment only describes the bycatch in other fisheries, which primarily consists of regulatory discards created by our management rules.

In the section on overfishing criteria, the Council acted conservatively by increasing our overfishing standard from 20 percent SPR (spawning potential ratio) to about 30 percent SPR to assure the stocks are managed at or above the MSY (maximum sustainable yield) level. The effect of these new standards, when approved, will likely be that several additional reef fish stocks will be classified as overfished and will require amendments to rebuild those stocks.

We have a fairly large number of coastal communities that likely would be classified as fishing communities. However, in gathering the U.S. Census data and other available information to characterize the economic and social structure of these communities, we found most of the data to be inadequate for that purpose, and certainly inadequate to assess impacts of management measures on the communities. We did call to the attention of Secretary Daley some actions that could be taken to make the U.S. Census data more useful for these purposes (Attachment 3).

As you can see from this discussion, the increased work load on the Councils from the SFA will carry over into the next several fiscal years. We call to your attention that the Administration proposed to increase the FY2000 allocation to the 8 Councils by only 2.3 percent, which will be inadequate to carry out that mandate.

I have appended the Gulf Council's recommendations of amendments needed under the re-authorization to the Magnuson-Stevens Act as Attachment 4, and we appreciate your consideration of these recommendations.

I thank you for this opportunity to testify on behalf of the Gulf Council.

ATTACHMENT NO. 1

NATIONAL MARINE FISHERIES SERVICE,
St. Petersburg, FL.

Mr. HAL OSBURN, *Chairman,*
Gulf of Mexico Fishery Management Council,
Tampa, FL.

DEAR HAL: This advises you that NMFS has partially approved the Generic Essential Fish Habitat (EFH) Amendment to the Fishery Management Plans of the Gulf of Mexico. All sections of the Amendment have been approved, except for sections 5.0. (Identification and Description of EFH) and 6.1 (Fishing Activities that may Adversely Impact EFH). NMFS approved only the EFH designation for the 26 selected species and coral complex in section 5.0 and only the fishing gear impact assessments on EFH discussed in the categories of trawls, recreational fishing, and traps in section 6.1.

I am asking that the Council place high priority on identifying and describing EFH for all non-selected managed species in a subsequent amendment as soon as possible. Additionally, the Council needs to describe and address the impacts of all fishing gears used in all EFH areas, also in future amendments. NMFS is committed to working cooperatively with the Council to complete the remaining work. NMFS expects to initiate a gear impact study this fiscal year, with emphasis given to trawl gear. Reports on the status of this research will be provided to the Council as the research progresses.

There appear to be errors in the text, tables and figures provided in the amendment. It appears that information provided by the SEFSC on Gag grouper EFH was unintentionally omitted relative to the distribution of juvenile Gag in Apalachee Bay, and there is no reference list for these fish. These errors should be corrected through errata sheets.

Explicit, regional research needs sections should be included in future EFH amendments to FMPs. Inclusion of this information will help identify data gaps and focus needed research to improve EFH identification and protection within the Gulf of Mexico. NMFS appreciates the great effort expended by the Council to complete the Gulf EFH amendment in a timely manner. We look forward to continuing our close association with the Council in working to improve and refine EFH designations, and in identifying and addressing adverse impacts to EFH.

Sincerely yours,

ANDREW J. KEMMERER,
Regional Administrator.

ATTACHMENT NO. 2

GULF OF MEXICO FISHERY MANAGEMENT COUNCIL,
Tampa, FL, March 23, 1999.

Dr. ANDREW J. KREMMERER, *Regional Administrator,*
St. Petersburg, FL.

DEAR DR. KEMMERER: The Gulf of Mexico Fishery Management Council (Council) has reviewed your letter dated February 8, 1999 concerning the partial approval of the Generic Essential Fish Habitat (EFH) Amendment to the Fishery Management Plans of the Gulf of Mexico. In Section 5.0, NMFS only approved EFH designations for the 26 selected species and coral complex. In Section 6.1, only the fishing gear impact assessments on EFH discussed in the categories of trawls, recreational fishing, and traps were approved. With this letter, the Council would like to comment on this partial EFH approval.

This Generic EFH Amendment was produced as a cooperative effort between the Council, the National Marine Fisheries Service, the Gulf States Marine Fisheries Commission, and the National Ocean Service. As stated in the Sustainable Fisheries Act, "NMFS, in consultation with participants in the fishery, shall provide each Council with recommendations and information regarding each fishery under that Council's authority to assist it in the identification of essential fish habitat, the adverse impacts on that habitat, and the actions that should be considered to ensure the conservation and enhancement of that habitat." This clearly states that it is NMFS's responsibility to provide EFH information to the Council.

The final draft, National Marine Fisheries Service Essential Fish Habitat Recommendations to the Gulf of Mexico Fishery Management Council, states on Page 2 that "The best available information was used that could be gathered in the time available for preparation of EFH descriptions. As additional information becomes available and as research results are produced, it is expected that the level of precision for designating EFH will be increased and that the appropriate FMPs will be amended accordingly." Specifically with regard to EFH designations the draft also states on Page 4 that ". . . even if maps of additional species was available, they would not encompass any habitat that is not already included and identified as EFH. EFH for the remaining managed species will be addressed in future FMP amendments, as appropriate." The Council would have included additional species EFH identifications and fishing gear impacts in the Amendment if this information had been provided or available but it was either not provided or unavailable. We reiterate that even if this data was available, they would not include any additional habitat that is not currently described as EFH for the selected species. It would be ludicrous for the Council to proceed with an additional amendment at this time and to attempt to specifically describe habitat of species for which such habitat is unknown especially when EFH has already been defined as all estuarine and marine habitat in the Gulf of Mexico (see page 22 of the Amendment).

Regarding impacts of fishing gear, the draft Recommendations on Page 11 State that "The NMFS understands that information is presently lacking in the Gulf of Mexico to draw definitive conclusions. As additional information becomes available, it should be included in the amendment."

Concerning the errors in the amendment, the Council simply copied the tables that were provided by NMFS. When corrected information is provided to the Council, we will be happy to correct the problems.

As stated in the NMFS recommendations to the Council and in the Amendment, as future information concerning individual species' EFH and fishing gear impacts on EFH becomes available, the Council will update the Amendment. Although your letter did not indicate a time frame for developing an update, it did include the terms "high priority" and "as soon as possible". While the Council looks forward to working closely with NMFS in the effort to further identify and describe EFH and fishing gear impacts in the Gulf of Mexico, it is our view that the primary responsibility to initiate gathering and developing this information lies with NMFS. While Council staff will proceed with gathering additional information for updating the Amendment, the Council's priority for this task will mirror that of NMFS, and we will proceed with appropriate amendments as data is made available.

Sincerely,

HAL OSBURN,
Chairman.

ATTACHMENT NO. 3

GULF OF MEXICO FISHERY MANAGEMENT COUNCIL,
Tampa, FL., June 23, 1999.

Hon. WILLIAM M. DALEY, *Secretary of Commerce,*
Washington, DC.

DEAR MR. SECRETARY: Pursuant to National Standard 8 of the Sustainable Fisheries Act, the Gulf of Mexico Fishery Management Council (Council) is required to assess the impacts of fishery regulations on fishing communities. In its Generic Sustainable Fisheries Act Amendment of several fishery management plans, the Council attempted to delineate the socioeconomic characteristics of fishing communities within the coastal counties of the five Gulf states. Census data for 1970,1980, and 1990 was assembled by the Louisiana State University through a MARFIN-funded study and used for this purpose. Because the census data aggregated information for persons employed in agriculture, fishing, and mining industries, and aggregated information on self-employed persons for the farming, fishing, and forestry sectors, the data cannot be used to assess impacts of measures on communities or even to provide an adequate representation of fishing communities. *To this effect, the Counci1 is requesting that for the year 2000 census, employment data in coastal counties should be collected and reported separately for fishing.*

We believe modifying the census for the coastal counties would be adequate to make the data set usable for fishery analyses related to fishing communities. We also feel it would be very advantageous if technical personnel within NMFS and NOAA were utilized to modify the census forms for the coastal counties so that the data is more appropriate in economically characterizing the communities. We sincerely hope for your favorable action on this matter that is of vital importance to all of the Councils.

Sincerely,

HAL OSBURN,
Chairman.

ATTACHMENT NO. 4

MAGNUSON-STEVENS ACT (MSA) REAUTHORIZATION ISSUES—GULF OF MEXICO FISHERY MANAGEMENT COUNCIL RECOMMENDATIONS

RESCINDING THE CONGRESSIONAL PROHIBITIONS ON IFOS (OR ITOS)

Currently Section 303(d)(1) of MSA prohibits a Council from submitting or the Secretary approving an IFQ system before October 1, 2000. Section 407(b) prohibits the Gulf Council from undertaking or continuing the preparation of a red snapper individual fishing quota (IFQ) or any system that provides for the consolidation of permits to create a trip limit before October 1, 2000. If the reauthorization process is completed in 1999, the Council supports rescinding those provisions before the year 2000 deadline. The Council also opposes extending the moratorium on IFQs.

REGIONAL FLEXIBILITY IN DESIGNING IFO SYSTEMS

The Council, while philosophically opposed to fees that are not regional in nature and dedicated by the Councils, is concerned over the ability of the overcapitalized fleets to pay fees. However, they do support the National Academy of Science (NAS)

recommendation that Congressional action allow the maximum flexibility to the Councils in designing IFQ systems and allowing flexibility in setting the fees to be charged for initial allocations, first sale and leasing of IFQs [MSA Sections 303(d)(2–5) and 304(d)(2)].

COORDINATED REVIEW AND APPROVAL OF PLAN AMENDMENTS AND REGULATIONS

The Sustainable Fisheries Act (SFA) amended Sections 304(a) and (b) of the MSA to create separate sections for review and approval of plans and for review and approval of regulations. This has resulted in the approval process for these two actions proceeding in different time periods, rather than concurrently as before the SFA Amendment, which also deleted the 304(a) provision allowing disapproval or partial disapproval of the amendment within the first 15 days. The Council and the Timely Review Panel recommend these sections be modified to include the original language allowing concurrent approval actions for plan amendments and regulations and providing for the initial 15-day disapproval process.

REGULATING NON-FISHING ACTIVITIES OF VESSELS

The Council recommends that Section 303(b) of MSA be amended to provide authority to Councils to regulate non-fishing activities that adversely impact fisheries or essential fish habitat (EFH) by vessels. One of the most damaging activities to such habitat is anchoring of large vessels near habitat areas of particular concern (HAPC) or other EFH (e.g., coral reefs, etc.). When these ships swing on the chain deployed for anchoring in 100 feet, 20 to 70 acres of bottom may be plowed up by the chain dragging over the bottom. Regulation of this type of activity should be allowed.

BYCATCH

The MSA, under Section 405, *Incidental Harvest Research,* provided for conclusion of a program to (1) assess the impact on fishery resources of incidental harvest by the shrimp trawl fishery of the Gulf and South Atlantic, and (2) development of technological devices or other changes to fishing operations necessary to minimize incidental mortality of bycatch in the course of shrimp trawl activity, etc. Because this program has been the principal vehicle under which research and data collection has been carried out, the Council recommends that this program be extended and funded for another 3 years.

GULF OF MEXICO RED SNAPPER RESEARCH (SECTION 407)

The research provided for has been completed. This section also provides, in Subsection (c), that a referendum be conducted by the National Marine Fisheries Service (NMFS) of persons holding commercial red snapper licenses, to determine if a majority support proceeding with an IFQ program and in Subsection (d) makes the recreational red snapper allocation a quota and provides for closure of the fishery when that quota is reached. The Council recommends that both subsections be rescinded. The recreational fishery closure is having severe adverse economic impacts on the charter and head boat sectors. This year that fishery is projected to close on August 29. As the red snapper stock is being restored, the size of fish increases each year and the closure comes earlier each year, e.g., November 27 in 1997 to August 29 in 1999.

COLLECTION OF ECONOMIC DATA [SECTION 303(B)(7)]

Situation.—Language throughout the MSA specifies the collection of biological, economic, and sociocultural data to meet specific objectives of the Act and for the fishery management councils to consider in their deliberations. However, Section 303(b)(7) specifically excludes the collection of economic data, and Section 402(a) precludes Councils from collecting "proprietary or confidential commercial or financial information." However, NMFS should not be precluded from collecting such proprietary information so long as it is treated as confidential information under Section 402. Without this economic data, multi-disciplinary analysis of fishery management regulations is not possible, preventing NMFS/Councils from satisfying the requirements of the Act and of the Regulatory Flexibility Act (RFA). Economic data is required to meet the requirements of RFA and other laws, yet MSA restricts the economic information that can be collected under the authority of the MSA.

Recommendation.—Amend the Act to eliminate these MSA restrictions on the collection of economic data. Amending Section 303(b)(7) by removing "other than economic data" would allow NMFS to require fish processors who first receive fish that are subject to the plan to submit economic data.

Discussion.—Removing this current restriction will strengthen the ability of NMFS to collect necessary data and eliminate the appearance of a contradiction in the law requiring economic analysis without allowing the collection of necessary data. NMFS and the Councils need data to be able to comply with RFA, and we should not be prohibited from requiring it.

CONFIDENTIALITY OF INFORMATION [SECTION 402(B)]

Situation.—Section 402 replaced and modified former Sections 303(d) and (e). The SFA replaced the word "statistics" with the word "information" expanded confidential protection from information submitted in compliance with the requirements of an FMP to information submitted in compliance with *any* requirement of the MSA, and broadened the exceptions to confidentiality to allow for disclosure in several new circumstances.

Recommendation.—The following draft language clarifies the word "information" in 402(b)(1) and (2) by adding the same parenthetical used in (a), and deletes the provision regarding observer information. The revised section would read as follows (additions in bold):

(b) Confidentiality of Information.

"(1) Any information submitted to the Secretary by any person in compliance with any requirement under this Act **and that would disclose proprietary or confidential commercial or financial information regarding fishing operations or fish processing operations shall not be disclosed**, except:

a. To Federal employees and Council employees who are responsible for fishery management plan development and monitoring;

b. To State or Marine Fisheries Commission employees pursuant to an agreement with the Secretary that prevents public disclosure of the identity or business of any person;

c. When required by court order;

d. When such information is used to verify catch under an individual fishing quota program; or

e. When the Secretary has obtained written authorization from the person submitting such information to release such information to persons for reasons not otherwise provided for in this subsection, and such release does not violate other requirements of this Act."

The Secretary shall, by regulation, prescribe such procedures as may be necessary to preserve the confidentiality of information submitted in compliance with any requirement under this Act **and that would disclose proprietary or confidential commercial or financial information regarding fishing operations or fish processing operations**, except that the Secretary may release or make public any such information in any aggregate or summary form which does not directly or indirectly disclose the identity or business of any person who submits such information. Nothing in this subsection shall be interpreted or construed to prevent the use for conservation and management purposes by the Secretary or with the approval of the Secretary, the Council, of any information submitted in compliance with any requirement or regulation under this Act or the use, release, or publication of bycatch information pursuant to paragraph (1)(E).

OBSERVER PROGRAMS

Reaffirm support to give discretionary authority to the Councils to establish fees to help fund observer programs. This authority would be the same as granted to the North Pacific Council under Section 313 for observers.

CONGRESSIONAL FUNDING OF OBSERVER PROGRAMS

Situation.—Currently, the Secretary is not authorized to collect fees from the fishing industry for funding of observer programs. Funding of observer programs has been through MSA or MMPA appropriations.

The lack of adequate appropriations to run observer programs has resulted in statistically inadequate observer programs that do not satisfy the monitoring requirements of the statutes. This is of particular concern with regard to observer requirements that are a requirement or condition of an ESA biological opinion or a condition of a take reduction plan or take exemption under the MMPA. In addition, funding is taken from extremely important recovery and rebuilding programs to pay for the observer requirements. Consequently, investigations into fishing practices or gear modification (or other areas that would actually prevent the lethal take from occurring or causing serious injury in the first place) cannot proceed.

Recommendation.—If the MSA is not amended to authorize the Secretary to collect fees from the fishing industry, then those fisheries that are required to carry

observers as a condition of biological opinion under ESA, or as a condition of a take exemption under the MMPA, should be funded through the Congressional appropriations directed toward fisheries management under the MSA.

DEFINING OVERFISH AND OVERFISHING [SECTION 3(29)]

Currently, both overfished and overfishing are defined as a rate of fishing mortality that jeopardizes the capacity of a fishery to produce maximum sustainable yield (MSY) on a continuing basis. The Administration proposed redefining these to be consistent with NMFS' guidelines in the guidelines for National Standard 1. The Council *opposes* this change and feels no change is needed.

STATE FISHERY JURISDICTION

The Council supports language in the Act to establish the authority of the states to manage species harvested in the exclusive economic zone (EEZ) that occur in both the State territorial waters and the EEZ, in the absence of a council fishery management plan similar to the language specified for Alaska in the last amendment to the Act.

ENFORCEMENT

The Council supports the implementation of cooperative state/Federal enforcement programs patterned after the NMFS/South Carolina enforcement cooperative agreement. While it is not necessary to amend the Act to establish such programs it is consistent with the changes needed to enhance management under the Act to suggest to Congress that they consider establishing and funding such cooperative state/Federal programs.

COUNCIL MEMBER COMPENSATION

The Act should specify that Council member compensation be based on the General Schedule that includes locality pay. This action would provide for a more equitable salary compensation. Salaries of members serving in Alaska, the Caribbean, and Western Pacific are adjusted by COLA. The salary of the Federal members of the Councils includes locality pay. The DOC has issued a legal opinion that prohibits Council members in the continental U.S. from receiving locality pay; therefore, Congressional action is necessary.

EMERGENCY RULE VOTE OF NMFS REGIONAL ADMINISTRATOR ON THE COUNCIL

Proposal.—Modify the language of Section 305(c)(2)(A) as follows (new language bolded):

(A) The Secretary shall promulgate emergency regulations or interim measures under paragraph (1) to address the emergency or overfishing if the Council, by unanimous vote of the members (excluding the NMFS Regional Administrator) who are voting members, requests the taking of such action; and . . .

Currently, the NMFS RA is instructed to cast a negative vote even if he/she supports the emergency or interim action to preserve the Secretary's authority to reject the request. The Council believes that Congressional intent is being violated by that policy.

DISCLOSURE OF FINANCIAL INTEREST AND RECUSAL

Proposal.—Modify the language of Section 302(j)(2) as follows (new language bolded):

(2) Each affected individual must disclose any financial interest held by:

(A) that individual;

(B) the spouse, minor child, or partner of that individual; and

(C) any organization (other than the Council) in which that individual is serving as an officer director, trustee, partner, or employee; in any harvesting, processing, or marketing activity that is being, or will be, undertaken within any fishery over which the Council concerned has jurisdiction, **or any financial interest in essential fish habitat (EFH).**

The Council feels an interest in EFH should be treated from an ethical point of view, the same as an interest in fishery operations, in determining whether a Council member should abstain from voting. The effect of this action would be to exclude the Council member who held interests in/or related to EFH from the provisions of Section 208 of title 18, USC, which would prevent that person from voting on habitat protection issues. However, if he/she were able to file a disclosure notice under 302(j) of the MSA they could vote unless that action would substantially change the

financial interests of the member. This action would put them on the same basis as a person having an interest in a commercial harvesting, processing, or marketing activity.

MAGNUSON-STEVENS ACT (MSA) REAUTHORIZATION ISSUES COUNCIL CHAIRMEN'S RECOMMENDATIONS

RESCINDING THE CONGRESSIONAL PROHIBITIONS ON IFQS (OR ITQS)

Currently Section 303(d)(1) of MSA prohibits a Council from submitting or the Secretary approving an IFQ system before October 1, 2000. Section 407(b) prohibits the Gulf Council from undertaking or continuing the preparation of a red snapper individual fishing quota (IFQ) or any system that provides for the consolidation of permits to create a trip limit before October 1, 2000. If the reauthorization process is completed in 1999, the Council chairmen support rescinding those provisions before the year 2000 deadline. The chairmen also oppose extending the moratorium on IFQs.

REGIONAL FLEXIBILITY IN DESIGNING IFQ SYSTEMS

The Council chairmen are philosophically opposed to fees that are not regional in nature and dedicated by the Councils, and are concerned over the ability of the overcapitalized fleets to pay fees. However, they do support the National Academy of Science (NAS) recommendation that Congressional action allow the maximum flexibility to the Councils in designing IFQ systems and allowing flexibility in setting the fees to be charged for initial allocations, first sale and leasing of IFQs [MSA Sections 303(d)(2–5) and 304(d)(2)].

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COLLECTION OF ECONOMIC DATA [SECTION 303(B)(7)]

Situation.—Language throughout the MSA specifies the collection of biological, economic, and sociocultural data to meet specific objectives of the Act and for the fishery management councils to consider in their deliberations. However, Section 303(b)(7) specifically excludes the collection of economic data, and Section 402(a) precludes Councils from collecting "proprietary or confidential commercial or financial information." However, NMFS should not be precluded from collecting such proprietary information so long as it is treated as confidential information under Section 402. Without this economic data, multi-disciplinary analysis of fishery management regulations is not possible, preventing NMFS/Councils from satisfying the requirements of the Act and of the Regulatory Flexibility Act (RFA). Economic data is required to meet the requirements of RFA and other laws, yet MSA restricts the economic information that can be collected under the authority of the MSA.

Recommendation.—Amend the Act to eliminate these MSA restrictions on the collection of economic data. Amending Section 303(b)(7) by removing "other than economic data" would allow NMFS to require fish processors who first receive fish that are subject to the plan to submit economic data.

Discussion.—Removing this current restriction will strengthen the ability of NMFS to collect necessary data and eliminate the appearance of a contradiction in the law requiring economic analysis without allowing the collection of necessary data. NMFS and the Councils need data to be able to comply with RFA, and we should not be prohibited from requiring it.

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Recommendation.—The following draft language clarifies the word "information" in 402(b)(1) and (2) by adding the same parenthetical used in (a), and deletes the provision regarding observer information. The revised section would read as follows (additions in bold):

(b) Confidentiality of Information.

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a. To Federal employees and Council employees who are responsible for fishery management plan development and monitoring;

b. To State or Marine Fisheries Commission employees pursuant to an agreement with the Secretary that prevents public disclosure of the identity or business of any person;

c. When required by court order;

d. When such information is used to verify catch under an individual fishing quota program; or

e. When the Secretary has obtained written authorization from the person submitting such information to release such information to persons for reasons not otherwise provided for in this subsection, and such release does not violate other requirements of this Act."

The Secretary shall, by regulation, prescribe such procedures as may be necessary to preserve the confidentiality of information submitted in compliance with any requirement under this Act **and that would disclose proprietary or confidential commercial or financial information regarding fishing operations or fish processing operations**, except that the Secretary may release or make public any such information in any aggregate or summary form which does not directly or indirectly disclose the identity or business of any person who submits such information. Nothing in this subsection shall be interpreted or construed to prevent the use for conservation and management purposes by the Secretary or with the approval of the Secretary, the Council, of any information submitted in compliance with any requirement or regulation under this Act or the use, release, or publication of bycatch information pursuant to paragraph (1)(E).

ENFORCEMENT

The Council chairmen support the implementation of a cooperative state/Federal enforcement programs patterned after the NMFS/South Carolina enforcement cooperative agreement. While it is not necessary to amend the Act to establish such programs it is consistent with the changes needed to enhance management under the Act to suggest to Congress that they consider establishing and funding such cooperative state/Federal programs.

COUNCIL MEMBER COMPENSATION

The Act should specify that Council member compensation be based on the General Schedule that includes locality pay. This action would provide for a more equitable salary compensation. Salaries of members serving in Alaska, the Caribbean, and Western Pacific are adjusted by COLA. The salary of the Federal members of the Councils includes locality pay. The DOC has issued a legal opinion that prohibits Council members in the continental U.S. from receiving locality pay; therefore, Congressional action is necessary.

OBSERVER PROGRAM

Reaffirm support to give discretionary authority to the Council to establish fees to help fund observer programs. This authority would be the same as granted to the North Pacific Council under Section 313 for observers.

ESSENTIAL FISH HABITAT

The 1996 MSFCMA required the Councils to identify and describe EFH, but gave little direction on how to designate EFH. The definition of EFH, i.e., "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity," allows for a broad interpretation. Data on species' relative abundance and distribution for each life history stage was interpreted in a risk-averse manner, as directed by the interim final rule. This led to EFH designations that were criticized by some, as being too far reaching. "If everything is designated as essential then nothing is essential," was a common theme throughout the EFH designation process, on a national and regional scale. **Either the EFH definition should be modified, or** the guidance on how to use different types of data should be more specific.

Data restrictions also hampered the EFH designation process. In the short-term, additional data could be used to refine the EFH designations. The MSFCMA also requires that EFH designations are reviewed every 5 years, which adds an additional burden to NMFS and the Councils and creates long-term and short-term funding and process needs. **This review requirement should be eliminated**.

INTERIM ACTIONS

Section 305(c) should be changed to allow adoption of interim rules for any of the 10 National Standards, not just to ". . . reduce overfishing . . ." under National Standard 1.

REBUILDING PERIODS

The Councils should have greater latitude for specifying rebuilding periods than is provided under the national standard guidelines, which are based entirely on biological considerations. The social and economic factors should be given equal or greater consideration in determining schedules that result in the Greatest Net Benefit to the Nation.

REDEFINE "OVERFISHING"

Problem: MSY-based definition of overfishing:

- MSY is an outdated and possibly inappropriate concept for fisheries management;
- Determining accurate estimations of MSY requires fishing at a range of effort, including well beyond the point of MSY;
- MSY does not reflect the difficulties in estimation nor the dangers of using it as a management objective;
- MSY changes over time due to environmental and other conditions, that may not directly be related to SPR;
- Adopting (or relaxing) various management measures may also change the resulting MSY.

Proposal.—The definition for overfishing should be broadened and made more flexible to accommodate other methods to assess overfishing that may be more appropriate based on the nature of the fishery and type and availability of data. For example it may be more appropriate to define overfishing based on the spawning biomass, exploitation rates, etc.

RECEIVE MONEY FROM ANY STATE OR FEDERAL GOVERNMENT ORGANIZATION

Problem: Council can only receive funds through the Department of Commerce/NOAA/NMFS:

The Councils work with other government organizations to support research, workshops, conferences or to procure contractual services. In Hawaii, examples include: Department of State and MHLC4; Department of the Interior and Seabird Workshop; State of Hawaii Office of Hawaiian Affairs and demonstration projects. In each of these cases, complex dual contacts, timely pass troughs and unnecessary administration/grant oversight were involved to complete the task.

Proposal.—Give Councils authority to receive money or support from other local, State and Federal Government agencies and non-profit organizations. This would be

consistent with the existing provision of the MSA Sec. 302 (f)(4) that requires the Administrator of General Services to provide support to the Councils.

BYCATCH ISSUES

Problem.—Inconsistent definition of bycatch between Atlantic and Pacific. In the Atlantic, highly migratory species harvested in catch and release fisheries managed by the Secretary under 304(g) of the MSA or the Atlantic Tunas Convention Act are not considered bycatch where in the Pacific they are.

Proposal.—HMS in the Pacific managed under a Western Pacific Council FMP that are tagged and released alive under a scientific or recreational fishery tag and release program should not be considered bycatch.

Note.—There is an inconsistency between the MSA definition of bycatch and the NMFS Bycatch Plan. NMFS definition is much broader and includes marine mammals and birds and retention of non-target species. The Council chairmen prefer the MSA definition.

The Council chairmen also wish to retain turtles in the definition of "fish" because of their importance in every region and especially in past and possibly future fisheries pursued by indigenous peoples of the Western Pacific Region.

FMP REVIEW PROGRAM

Problem.—In the review of recommended management measures, NMFS has failed to adequately communicate to the Councils perceived problems in a timely manner.

Proposal.—Mandate that NMFS consult with the Councils before disapproving FMPs, amendments or rule changes under frameworking procedures.

EMERGENCY RULE VOTE OF NMFS REGIONAL ADMINISTRATOR ON THE COUNCIL

Proposal.—Modify the language of Section 305(c)(2)(A) as follows (new language bolded):

(A) The Secretary shall promulgate emergency regulations or interim measures under paragraph (1) to address the emergency or overfishing if the Council, by unanimous vote of the members (**excluding the NMFS Regional Administrator**) who are voting members, requests the taking of such action; and . . .

Currently the NMFS RA is instructed to cast a negative vote even if he/she supports the emergency or interim action to preserve the Secretary's authority to reject the request. The Council chairmen believe that Congressional intent is being violated by that policy.

MAFMC AT-LARGE SEAT

The Council chairmen recommend that an additional At-Large seat be added to the MAFMC along with funding for that purpose. If such a seat was added, most of the time it would likely be filled by the State of North Carolina. This would allow the State to have both a recreational and commercial representative on the MAFMC.

Senator SNOWE. Thank you.

Mr. Delaney.

STATEMENT OF GLENN ROGER DELANEY, U.S. COMMISSIONER, INTERNATIONAL COMMISSION FOR CONSERVATION OF ATLANTIC TUNAS

Mr. DELANEY. Thank you.

Madam Chair, as one of the three Commissioners appointed by the President to ICCAT, I am very grateful for the opportunity to provide testimony on the implementation of the Sustainable Fisheries Act, with particular respect to Atlantic highly migratory species of fish. It is not often that these species get this level of attention, and I greatly appreciate that.

I would also say that if your votes this morning were to reduce my taxes, it was well worth our time to sit here and wait for you. [Laughter.]

Senator SNOWE. We are getting there.

Mr. DELANEY. For the record, ICCAT is the International Commission for Conservation of Atlantic Tunas, comprised of 27 members, representing over 40 nations. ICCAT conducts research and sets international conservation regulations for such species as Atlantic swordfish, the various billfish species, and the five major species of Atlantic tunas.

Given that our time is our brief, I would like to make some very simple points: because Atlantic highly migratory species are so important, and because the biology and fisheries for these species are so unique, these species must continue to be treated under the Act separately and differently from those species under regional council authority. In fact, I believe those distinctions need to be further clarified and strengthened.

But, first, Atlantic highly migratory species are important to the economy of our fishing communities. The ex-vessel value of commercial fisheries for these species is about $100 million, involving over 10,000 vessels from Maine to Texas. This value is comparable to such major fisheries as Atlantic sea scallops. I might note that it has provided an important alternative source of income for New England groundfishermen.

U.S. recreational fishermen take 100,000 trips each year to fish for these species, spending $200 million at billfish tournaments alone. The biology of these fish is also very unique. A bluefin tuna can make a 4,200 mile transatlantic migration in 50 days, due in part to its ability to regulate its body temperature as much as 10 degrees above that of the water. Swordfish are ubiquitous in the Atlantic, migrating vast distances and depths, following currents, temperature gradients, and even the cycle of daylight.

The fisheries for these species are also unique, and among the most distant water of all. U.S. Atlantic swordfishermen may travel 8 or more days just for the opportunity to compete side by side with ships from 20 nations, all fishing on the same stocks. When they return to port, our fishermen have to compete with the 80 nations that export swordfish to the U.S. market.

Nevertheless, as important as these species are to the United States, the reality is that the total U.S. catch of all ICCAT-managed species represents less than 5 percent of the total harvest of these species by all ICCAT nations. This is perhaps the most important distinction from other U.S. fisheries, because it means that the United States cannot conserve, manage or rebuild Atlantic highly migratory species unilaterally.

Consequently, U.S. policy has long recognized that multilateral cooperation throughout the range of these species is essential to effective conservation. I believe this reauthorization provides the opportunity to strengthen this policy through greater linkage of domestic management to U.S. international policy objectives and obligations at ICCAT. I would like to provide two specific examples.

First, section 304(e), and other sections of the Act, should be clarified to specifically reflect the policy set forth by Madam Chair, Senator Breaux, and other members of this committee in a January 1998 letter to NOAA, providing extensive clarification of congressional intent regarding the SFA. I quote from this letter:

> Finally, the law makes clear that U.S. regulatory measures, including rebuilding schedules for fisheries managed under an international agreement to

which the United States is a party, must be consistent with the recommendations or regulatory measures adopted under the agreement.

As you stated, this policy should be clarified not only in section 304(e), but through the Act, where appropriate.

My second example regards section 304(g), which sets forth plan development provisions specific to highly migratory species. I believe this section should be clarified to ensure that our domestic implementation of ICCAT conservation measures reflects the explicit intent of U.S. Commissioners as to how such measures are applied to U.S. fishermen and women.

I draw the analogy to congressional intent in legislative history to which NMFS rightly looks when implementing fishery legislation. However, when NMFS implements fishery agreements made at ICCAT, there is no analogy to such legislative history that documents the Commissioners' intent. This is a problem because, as an ICCAT Commissioner, I have two fundamental responsibilities: first, to protect the resource; and, second, to protect the best interests of U.S. fishermen and women, both commercial and recreational.

What and how the Commissioners negotiate depends heavily on our knowing how a particular conservation measure will be implemented domestically and how it will affect the lives and families of U.S. fishermen in their communities back home. Unfortunately, domestic implementation of our ICCAT conservation obligations has not always reflected the express intent of the Commissioners on some very key issues. This undermines the role of the Commissioners, and will limit our ability to be the aggressive conservation leaders at ICCAT we have become in recent years.

I would also note that it has led to a number of lawsuits—I think there are nine now—for the highly migratory species plan—on one plan alone.

I believe that if there is specific Commissioner intent associated with a specific ICCAT obligation, and that intent is not inconsistent with the Act, then such intent should be reflected in the relevant implementing plans and regulations.

In closing, I would be grateful for the opportunity to work with the Committee to develop an appropriate process and provision to address this concern. I would be happy to respond to any questions you may have. I would also like to particularly thank Madam Chair and the other members, Senator Breaux and Senator Kerry, and others of this Committee, who have been very supportive of our efforts to solve the many problems at ICCAT and to try to make ICCAT work.

You have committed your time and efforts to understand these fisheries and the ICCAT process, and have even committed the time of your staff to directly participate in our meetings. This has been a great contribution, and I know all the Commissioners greatly appreciate it. Thank you very much.

[The prepared statement of Mr. Delaney follows:]

PREPARED STATEMENT OF GLENN ROGER DELANEY, U.S. COMMISSIONER, INTERNATIONAL COMMISSION FOR CONSERVATION OF ATLANTIC TUNAS

Madam Chair, Senators, ladies and gentlemen, as one of the three U.S. Commissioners appointed by the President to ICCAT, I am grateful for the opportunity to

provide testimony on the implementation of the Sustainable Fisheries Act with respect to Atlantic Highly Migratory Species of fish.

For the record, ICCAT is the International Commission for the Conservation of Atlantic Tunas which is a 27-member forum representing over 40 nations including the U.S. Its charge is to conduct research and to conserve and manage commercial and recreational fisheries for highly migratory species throughout the Atlantic Ocean. These include swordfish, the billfish species—Blue and White marlin, Sailfish and Spearfish, and the Atlantic tunas including: Bluefin, Bigeye, Yellowfin, Skipjack and Albacore. ICCAT also collects important catch data on species of oceanic sharks such as blue, porbeagle, mako and thresher.

The Sustainable Fisheries Act was indeed a remarkable achievement by Congress and this Committee in particular. It was perhaps the most comprehensive review and revision of the Act ever accomplished. Nevertheless, due in part to our experience with the implementation of the SFA to date, and due in other part to the fundamental reality that fisheries research, conservation and management are forever dynamic, still further revisions will be necessary. This certainly holds true for the highly migratory species policy and provisions of the Act and so I am very pleased to have this considered as part of the process.

Given that my time is very brief, I would like to make some very simple points: that highly migratory species are very important; that highly migratory species biology and fisheries are very unique; and, because of this, highly migratory species must continue to be treated in the Act in a manner that is very distinct from those fisheries under Regional Council authority. In fact, I believe those distinctions need to be further clarified and strengthened.

First, I would like to present a few facts from the NMFS socio-economic data regarding the economic importance of these fisheries.

• By my own estimates commercial fisheries for Atlantic highly migratory species have an ex-vessel value of about $100 million involving over 10,000 vessels from Maine to Texas. This accounts for about 5 percent of the ex-vessel value of total U.S. catch of all finfish species and is comparable in value, for example, to the total value of the New England Sea Scallop fishery as well as to the Atlantic and Gulf of Mexico menhaden fishery, one of the largest volume fisheries in the U.S.

• NMFS has literally issued 20,194 permits to U.S. commercial and recreational fishermen just to fish for Bluefin Tuna, and this fishery has provided an important alternative source of income to the currently depressed New England groundfish economy.

• There are nearly 400 permitted U.S. pelagic longline vessels with over 1,400 crew members supporting about 3,500 shoreside jobs, and NMFS has issued permits to over 200 U.S. dealers just to handle their $19 million (ex-vessel) swordfish catch.

• NMFS estimates U.S. recreational fishermen spend 100,000 fishing trips per year targeting these large pelagic fish. Billfish tournament anglers alone spend nearly $200 million each year which equates to about $4,000 per billfish caught.

• Fresh Atlantic swordfish and tuna are among the most expensive seafood dishes in the most expensive restaurants in America. At times, the best quality U.S.-caught Atlantic Bluefin Tuna have sold for over $25,000 at the Tsukiji fish market in Tokyo.

As I stated, HMS are also very different—their biology is different and their fisheries are different. In terms of biology:

• Bluefin Tuna have been documented to make a 4,200-nautical mile trans-Atlantic migration in as few as 50 days and those tagged this summer off Maine and Massachusetts by Dr. Molly Lutcavage of the New England Aquarium will likely show up off Iceland, in the Sargasso Sea, or in the Mediterranean.

• Although everyone knows fish are cold blooded, Bluefin Tuna are actually able to regulate their body temperatures as much as 10 degrees above the water temperature. This adaptation has allowed this species to extend its range far beyond that of tropical and semi-tropical tunas.

• Swordfish are virtually ubiquitous in the North and South Atlantic Ocean, migrating vast distances as they follow currents and temperature gradients. And, unlike nearly all other U.S. fishery resources, highly migratory species are the apex predators of the marine ecosystem. They tend to be long lived and reproduce at a relatively late age.

In terms of the fisheries:

• Compared to most other U.S. fisheries, which occur nearshore and well within the U.S. EEZ, some HMS fisheries are among the most distant water of all. Some of you may have come to appreciate just how distant after reading the recent best-seller "The Perfect Storm".

• U.S. Atlantic swordfishermen may travel 8 or more days in relatively small vessels just to reach their fishing grounds where they then have to compete side-by-

side with fishing ships from 20 or more nations all fishing on the same stocks. If and when they make it back home, our swordfishermen then have to compete with the 80 nations that export swordfish to the U.S. market.

• Finally, although these fisheries are very important to the U.S. in terms of our fisheries economy and recreation, the total U.S. catch of all ICCAT-managed species represents less than 5 percent of the total harvest of these species by all ICCAT fishing nations.

This is perhaps the most critical difference because it means that, unlike nearly all other U.S. fish stocks, the U.S. cannot conserve, manage or rebuild any Atlantic highly migratory species *unilaterally*. Instead, U.S. policy recognizes that effective conservation and management of these species can only be achieved on a multilateral cooperative basis throughout their range.

Based on this policy and our experience with the implementation of the SFA, I believe there needs to be an even clearer and stronger link made in the Act between our international policy objectives for HMS and the resulting domestic implementation. I will provide two specific examples.

First, as you will recall Madam Chair, there had been an extensive debate with NMFS as to the proper interpretation of the section 304(e) rebuilding provisions as they related to HMS. Thanks to the interpretations provided by you, Senator Breaux and other members of this Committee, we have thus far prevented the 'tail from wagging the dog' in terms of having domestic fishery management plans preempt and dictate U.S. international policy at ICCAT. Still, I believe this reauthorization process provides an opportunity we should take to clarify your intent in the statute as so well stated in your and Senator Breaux's January 28, 1998, letter to Terry Garcia, and I quote:

> Finally, the law makes clear that U.S. regulatory measures, including rebuilding schedules, for fisheries managed under an international agreement to which the United States is a party must be consistent with the recommendations or regulatory measures adopted under the agreement.

This policy also needs to be strengthened in section 304(g), which includes the fishery management plan development provisions that are specific to highly migratory species. In that subsection, I believe a stronger linkage of plan development to what I will call 'Commissioner intent' is needed.

I draw the analogy to the notion of Congressional intent in legislative history to which the Administration rightly looks when promulgating plans and regulations to implement fishery legislation. Though not binding, it provides critical guidance to the agency. However, when NMFS promulgates fishery management plans and regulations to implement our obligations under ICCAT agreements, there is no analogy to such legislative history that documents "Commissioner intent".

Why is this a problem? When I go to ICCAT as a Commissioner I believe I have two fundamental responsibilities: (1) to protect the resource, and (2) to protect the interests and maximize the benefits to U.S. fishermen. Both are weighty responsibilities that all the Commissioners take every seriously.

When we make proposals and negotiate with other nations at ICCAT, and enter the United States into international conservation obligations, it is always with the best interests of U.S. fishermen, both commercial and recreational, in the forefront of our minds. What and how we negotiate depends heavily on our having a reasonably strong degree of confidence as to how a particular conservation measure will be implemented by the U.S., how it will be applied to the various U.S. fishery sectors and, thus, how it will affect the lives and families of U.S. fishermen back home.

Unfortunately, domestic implementation of our ICCAT conservation obligations has not always reflected the express intent of the Commissioners on some key issues. This makes me very uncomfortable. Not knowing what effect our negotiations and agreements will have on U.S. fishermen and their coastal communities seriously undermines our role as Commissioners. Ultimately, I think it will limit our ability to be the aggressive conservation leaders at ICCAT we have been in recent years. I think it has also led unnecessarily to some of the costly litigation now facing the agency.

Of course, this is not to suggest that the Commissioners should be in a position to preempt the policies of the Act or the usual prerogatives of NMFS. However, if there is specific Commissioner intent associated with a particular ICCAT obligation, and that intent is not inconsistent with the policies and provisions of the Act, then I believe the Act should ensure that such intent is ultimately reflected in the relevant plans and regulations. I would be grateful for the opportunity to work with the Committee to develop an appropriate process to address this concern.

Finally, I would like to briefly raise some further issues for your consideration regarding provisions of the Act as they relate to Atlantic highly migratory species.

(1) NATIONAL STANDARD 1 AND THE DEFINITIONS OF "OVERFISHED" AND "OVERFISHING"

I think the use of MSY as a goal is as useful as any of the reference points regarding the condition of a fish stock. However, I think the Act could reflect a better understanding of what it is, what the underlying assumptions are, and what its limitations are. I think there is a generally held misconception that any fishery that is not continuously producing the maximum sustainable yield is somehow in imminent danger of collapse. As a result, I think the Act is fairly conservative in its application of this concept.

This issue relates to the definitions of "overfishing" and "overfished". I don't think these two terms should be used in the same definition. I think it is appropriate to use MSY as a reference point to define a fishery as "overfished" with the meaning that the stock is not producing the greatest yield it could and that our goal should be to gain the greatest yield, in terms of fishing mortality, that we can from a fish stock. But, this has more to do with maximizing the benefits of a fishery resource to the U.S. than it does to the actual protection of a fish stock from decline.

In my view, the concept of "overfishing" relates more to the issue of sustainability. Fisheries can be perfectly sustainable at yields that are less than the maximum so long as there is an equilibrium between the stock inputs of recruitment and growth, and the stock outputs; natural and fishing moralities. In my view, overfishing is not occurring if the level of fishing mortality is sustainable—meaning that fishing and natural mortality are in equilibrium with the sum of growth and recruitment. There is no decline of the stock under that circumstance. The definition of overfishing should reflect a fishing mortality rate that when combined with the natural mortality rate is not in equilibrium with growth and recruitment and, as a result, is causing the stock to decline by weight or numbers of fish.

I would note there is probably some low level of stock biomass that represents a critical level below which a stock might collapse because the reproductive potential has been reduced too far. But, above such a threshold, I think it might be worth reevaluating how we define these terms and how we apply them as either absolute standards or goals.

Finally, I would note that a fundamental assumption of MSY is that environmental parameters are constant. As we know from fishery science, however, physical parameters such as temperature, salinity, sunlight, nutrients, and currents in estuarine, coastal, demersal and pelagic environments have perhaps the most profound effect on recruitment, growth and natural mortality.

Why this can be a problem is that MSY is sometimes based on historical data on fisheries during times when environmental parameters were almost certainly different than they are today. As a result, it may not even be possible today for a stock to achieve an MSY calculated from data on a fishery 20 or 30 years ago—even at a fishing mortality level of zero. My suspicion is that this may be the situation we face with western Atlantic Bluefin Tuna.

In a similar line of thought, I think it is also unclear within the field of fishery population dynamics whether the individual species of a given fishery ecosystem can all achieve the species-specific MSY simultaneously. When codfish and haddock stocks are low, we can predict a relatively high MSY for dogfish. But if those stocks rebound, can we expect to achieve the same MSY for dogfish while simultaneously achieving high yields of codfish and haddock? Probably not.

Again, the stringency the Act holds itself to MSY should be considered. The point in time at which an MSY for a stock is determined relates heavily to the complex relationship between prevailing environmental parameters and ecosystem dynamics. As such, should it be an absolute standard, or should it be a general goal? And, should the Act consider a fishery's sustainability in addition to whether it is producing the absolute maximum sustainable yield in weight or numbers of fish?

(2) NATIONAL STANDARD 2

The best available science for highly migratory species is inadequate. For example, for the past 16 years, ICCAT has managed the Bluefin Tuna as two separate stocks based in part on the premise that one of these two stocks spawns exclusively in the Mediterranean and the other in the Gulf of Mexico. Now the U.S. is tagging fish of spawning age and size that are frequenting vast areas of the central Atlantic/Sargasso Sea areas at the very same time our science tells us they should be spawning.

Sixteen years of managing the species based on fundamentally-incorrect assumptions may well have caused significant but unknown economic harm to U.S. fishermen and may have seriously compromised our ability to effectively manage this species. The bottom line is we need more science. We need more dollars for science.

Satellite pop-up archival tagging is a good start and this needs to be substantially expanded for many ICCAT species.

Finally, the General Accounting Office is currently performing a comprehensive study on NMFS implementation of this national standard. A careful review of the results of this study when available may provide important guidance to the Committee for further revisions to the statute in this context.

(3) NATIONAL STANDARD 8

Socioeconomic data on U.S. fisheries is generally inadequate to support proper implementation of this new national standard. The situation with respect to Atlantic highly migratory species is certainly no exception. A greater commitment of agency resources to the collection and proper analysis of socioeconomic data is needed. Proper application of the requirements of the Regulatory Flexibility Act would also help to satisfy the requirements of this national standard.

The General Accounting Office is currently performing a comprehensive study on NMFS implementation of this national standard as well. A careful review of the results of this study when available may also provide important guidance to the Committee for further revisions to the statute in this context.

(4) NATIONAL STANDARD 9

This standard requires fishery management plans to minimize bycatch to the extent practicable. Bycatch is a tough issue for highly migratory species fisheries—both commercial and recreational. However, please be aware that much of the U.S. bycatch of highly migratory species is "regulatory" bycatch—meaning fish that are *required* by NMFS regulation to be discarded by U.S. fishermen. I believe this approach needs to be seriously reevaluated. Does it make sense to first require a fisherman to discard certain fish and then subsequently to establish bycatch reduction requirements on those same regulatory discards? I believe it is only logical that a national standard policy that requires minimization of bycatch should preclude the widespread use by the agency of regulatory discard requirements to achieve conservation goals. More creative management is needed.

(5) SECTION 304(G) HIGHLY MIGRATORY SPECIES ADVISORY PANELS

This section requires the Secretary to establish for each highly migratory species fishery management plan an advisory panel under section 302(g). Section 302(g)(4) requires each such advisory panel to "be balanced in its representation of commercial, recreational, and other interests". NMFS has established two such advisory panels; one for "Atlantic highly migratory species" and one for "Atlantic billfish". Two issues need to be considered. First, whether the appointment of only one commercial fishing representative to the billfish advisory panel meets the statutory test for "balanced". The second issue relates to the fact that, although this is not set forth in the statute, NMFS often combines these two panels for meetings to secure input on both plans. The net result of this combination is a very different "balance" of interests than that of the two advisory panels held separately. Again, it is unclear if such combined meetings and the procedures thereof meet the statutory test for "balanced".

Thank you again for this opportunity to present my views. I look forward to working with the Committee on these and other important issues. I would be happy to respond to any questions at this time.

Senator SNOWE. Thank you very much, Mr. Delaney.

Mr. Hinman.

STATEMENT OF KEN HINMAN, PRESIDENT, NATIONAL COALITION FOR MARINE CONSERVATION, ON BEHALF OF THE MARINE FISH CONSERVATION NETWORK

Mr. HINMAN. Thank you. Good afternoon, Madam Chair.

My name is Ken Hinman. I am President of the National Coalition for Marine Conservation. I have been working on marine fisheries management issues professionally for over 20 years, since shortly after passage of the Magnuson Act in 1976. I have served on numerous council advisory panels, as well as the ICCAT Advisory Committee. Recently, I was proud to serve as a member of the

NMFS Ecosystems Advisory Panel that Dave Fluharty mentioned earlier.

I am appearing before you today on behalf of the Marine Fish Conservation Network, of which I am co-chair. I appreciate this opportunity to present the views of the Network on implementation of the Sustainable Fisheries Act by NMFS and by the councils.

The Network is a broad-based coalition of more than 80 leading environmental groups, commercial and sport fishermen, and marine scientists that came together 6 years ago to seek reform of the Nation's fisheries laws.

Enactment of the SFA in 1996 represented a sea change in the way marine fish are to be managed in the United States.

No longer would short-term economic concerns be used to allow overfishing, postpone rebuilding and to sacrifice future economic benefits. Overfished stocks would be rebuilt as soon as possible to healthy and productive levels, and kept there. Bycatch, a serious but largely unaddressed problem in many fisheries for many years, would be assessed and minimized. Essential fish habitat, the biological foundation of all of our fisheries, would be identified and protected from degradation from both fishing and non-fishing activities.

Unfortunately, what began with such promise in 1996 has failed in many ways to live up to that promise in 1999. The Network was the primary advocate of the conservation reforms of the SFA. Utilizing our member organizations, active in every region of the country, we have evaluated the revised fishery management plans and FMP amendments submitted to NMFS by the councils. We forwarded our report, evaluating the councils' response to the SFA, "Missing the Boat," to this Subcommittee in February.

Since then, we have been actively involved in evaluating the NMFS review of the SFA implementation amendments, and have found their response lacking in several key areas. The councils commonly adopted rebuilding plans with the longest recovery periods permitted under the law, instead of rebuilding overfished stocks in as short a period as possible. By pushing recovery schedules to the absolute limit, given the scientific uncertainties involved in making projections on rebuilding, we are concerned that the recoveries could and, in some cases, are likely to take much longer than 10 years.

Short-term overfishing is illegally allowed in several fisheries. The NMFS National Standards guidelines regulations allow overfishing of some fish stocks to occur in mixed-stock fisheries unless the stock will be driven to extinction.

To address these concerns, the Subcommittee may wish to prohibit overfishing of every stock in a mixed-stock fishery, which would effectively overturn the mixed-stock exception; mandate the application of the precautionary approach to fisheries management by requiring that conservation and management measures include a safety margin, to provide a buffer against scientific uncertainty and the risk that rebuilding schedules will not be met.

Of the amendments submitted to NMFS to date, none contain any new measures to minimize bycatch. NMFS has allowed the councils to ignore the bycatch requirements by approving the vast majority of these deficient bycatch amendments. To date, only five

of 22 amendments where NMFS has issued a decision have been disapproved.

To address these concerns, Congress may wish to refine the definition of bycatch to more specifically address the root causes—nonselective fishing practices resulting in uncontrollable fishing mortality. Second, Congress must strengthen the national policy in the Magnuson-Stevens Act to avoid bycatch in marine fisheries, not just deal with the discards. Finally, amend the Act to require fishery managers to establish bycatch reduction targets and schedules to meet these targets.

A bright spot in the otherwise mediocre response to the SFA was the identification of essential fish habitat. Across the board, councils engaged in a thorough information-gathering process, solicited much public input, and produced documents that should help protect EFH.

But all of the councils failed to conduct comprehensive assessments of fishing impacts on EFH. Every council failed to adequately reduce the harmful effects of fishing on EFH. NMFS has approved all but three of these inadequate EFH amendments.

To address these concerns, the Subcommittee may wish to consider an amendment to the Magnuson Act to require regional fishery management councils to act to protect EFH from adverse fishing impacts. To further encourage councils to take action, amend the Act to prohibit the introduction of new fishing gear or the opening of closed areas to prohibited fishing gear unless EFH damage is minimized.

Finally, to ensure that EFH is protected from land-based activities, the Subcommittee could enhance the NMFS EFH consultation authority by requiring Federal agencies to ensure that their actions are not likely to adversely affect EFH.

In regard to some more general fisheries management concerns, the Network is concerned, as we heard from a lot of others this morning, with the serious lack of comprehensive fisheries data. The Subcommittee may wish to consider addressing this problem in two ways.

First, in many parts of the country, inadequate fisheries surveys are conducted because of a lack of funding. Inadequate fishery-independent data is recognized as a major impediment to sound fishery management of many fisheries. NMFS is attempting to address these problems by purchasing four new fisheries research vessels. Funding for the first is contained in its fiscal year 2000 budget request. The Subcommittee should support this request, as well as funding for fisheries surveys generally.

The second way—and this is seconding what many of the previous witnesses have endorsed, as well as Senator Kerry in his opening remarks—is obtaining fisheries data through the use of onboard observers. Observer-generated information can provide the statistically significant and reliable information necessary to meet the objectives of the Magnuson Act. To improve observer coverage, Congress may consider amending the Magnuson Act to establish a mandatory fishery observer program for all federally-managed fisheries, and fund observer programs with a user fee based on value and applied to all fish landed and sold in the United States.

The regional councils are charged with the conservation and management of the Nation's marine fish, which are held in trust for all Americans. Unfortunately, the councils are dominated by representatives of the fishing industry. To address this concern, Congress may wish to amend the Magnuson Act to ensure that councils are more broadly representative of the public interest as they make decisions regarding the conservation and management of public resources.

Last, we would like to take just a moment to react to some of the reauthorization issues included in the testimony of the council chairmen that was submitted for the record. While we are supportive of certain of their suggestions, we have some concerns with others. The council chairs are advocating unconditionally that the moratorium on IFQ's not be extended. The Network disagrees with an unconditional lifting of the moratorium, believing instead that the moratorium should be extended unless and until Congress satisfactorily establishes the conservation standards the Network has identified as necessary components of any IFQ program.

Standards must be adopted that, among other things, clarify that IFQ programs do not create a compensable property right, demonstrably provide substantial new conservation benefits to the fishery, are of limited duration, and are reviewed periodically by an independent body to determine whether they are living up to those standards and, based on this review, whether IFQ programs or quota shares would be renewed, terminated, restructured or reallocated.

Finally, and maybe most importantly, the Network strongly opposes the councils' suggestion that they be given greater latitude in specifying rebuilding periods, and that economic considerations be given equal or greater consideration. As I stated earlier, the councils have fully utilized the latitude provided them by consistently developing 10-year rebuilding plans—the longest allowed under law. Allowing the councils greater latitude in placing greater emphasis on short-term economics will result in extending rebuilding periods even longer. Instead of easing economic hardship, this would prolong it.

I would like to second the remarks of Mr. Hill in the previous panel that swift and deliberate action to rebuild fisheries can provide far greater economic benefits in the long run than to take incremental and baby steps, and prolong the economic hardship through a protracted recovery period.

I have probably gone over my limit, so I will wrap up my comments here, and thank you for allowing the Network the opportunity to address these concerns. I would be happy to answer any questions. Thank you.

[The prepared statement of Mr. Hinman follows:]

PREPARED STATEMENT OF KEN HINMAN, PRESIDENT, NATIONAL COALITION FOR MARINE CONSERVATION

Good morning Madame Chair and Members of the Subcommittee, my name is Ken Hinman. I am President of the National Coalition for Marine Conservation. I am appearing before you today on behalf of the Marine Fish Conservation Network (Network), of which I am Co-Chairman. I appreciate the opportunity to present the views of the Network on implementation of the Sustainable Fisheries Act (SFA) by the National Marine Fisheries Service (NMFS) and the regional fishery management councils (councils). The Network is a broad-based coalition of more than 80

leading environmental groups, sport and commercial fishermen, and marine scientists that came together 6 years ago to seek reform of the nation's fisheries laws. Overall, our member groups represent more than two million Americans.

The Network is unique in that it represents both environmentalists and fishermen. In fact, the commercial and recreational fishermen that are Network members are some of the strongest conservationists you will find. That is what makes the Network truly unique, fishermen working hand in hand with environmentalists to conserve marine fish for future generations.

Enactment of the SFA in 1996 represented a sea change in the way marine fish are to be managed in the United States. No longer would short-term economic concerns be used to allow overfishing and postpone rebuilding. Overfished stocks would be rebuilt as soon as possible. Bycatch, the catch of non-target species, would be assessed and minimized. Essential Fish Habitat (EFH), critical to the long-term sustainability of U.S. fish, would be identified and protected from degradation resulting from both fishing and non-fishing activities. Unfortunately, what began with such promise in 1996 has failed to live up to that promise in 1999.

The Network was the primary advocate of the conservation reforms of the SFA, including mandates to prevent and stop overfishing, rebuild overfished stocks, minimize bycatch, and protect essential fish habitat. As such, we are very concerned that the SFA is implemented as Congress intended. Utilizing our member organizations active in every region of the country, we have evaluated the revised fishery management plans (FMPs) and FMP amendments submitted to NMFS by the councils. We forwarded our report evaluating the councils' response to the SFA entitled Missing the Boat: An evaluation of fishery management council response to the Sustainable Fisheries Act to the Subcommittee in February 1999.

Since then, we have been actively involved in NMFS's review of the SFA implementation amendments and have found their response lacking in several areas. Below is a listing of our primary areas of concern.

OVERFISHING

The SFA requires that FMPs contain a new definition of overfishing, setting both maximum fishing mortality levels and minimum population size thresholds. For species determined to be overfished, it requires that FMPs include conservation measures designed to rebuild the stocks to maximum sustainable yield (MSY) within a prescribed period. The plans must include provisions to restore the population to MSY in less than 10 years, unless the biology of the species dictates a longer rebuilding period, in which case recovery should be "as short as possible."

Network Issues

- The councils commonly adopted rebuilding plans with the longest recovery periods permitted (10 years), instead of rebuilding overfished stocks in as short a period as possible.
- Short-term overfishing is illegally allowed in several fisheries, e.g., Atlantic Sea Scallops, Monkfish, and Black Sea Bass.
- NMFS's National Standard Guideline regulations allow overfishing to occur in mixed stock fisheries, unless the stock will be driven to extinction. This "mixed stock" exception has allowed certain councils to sanction overfishing of severely depleted fish stocks, e.g., Boccacio Rockfish on the west coast.

There are several legislative options to address these concerns that the Subcommittee may wish to consider as it develops legislation to reauthorize the Magnuson-Stevens Act. First, prohibit overfishing of every stock in a mixed stock fishery, which would effectively overturn the "mixed stock exception." Second, prohibit overfishing of each population of an overfished species to prevent even short-term overfishing. Finally, mandate the application of the precautionary approach to fisheries management by requiring that conservation and management measures include a safety margin to provide a buffer against scientific uncertainty, thus guarding against inadvertent overfishing. Caution is particularly important given the fact that the status of 544 species of managed fish is currently unknown. This level of uncertainty is an accident waiting to happen.

BYCATCH

The SFA requires councils to establish a standardized reporting methodology to assess the amount and type of bycatch in managed fisheries. The Act also requires councils to adopt conservation and management measures that avoid bycatch and minimize the mortality of unavoidable bycatch.

Network Issues

- No council established a required standardized bycatch reporting system.

• Of the amendments submitted to NMFS to date, *none* contain any new measures to reduce bycatch.
• NMFS has allowed the councils to ignore the bycatch requirements by approving the vast majority of these deficient bycatch reduction measures (to date, only 5 of 22 amendments where NMFS has issued a decision have been disapproved).

To address these concerns, Congress may wish to refine the definition of bycatch to more specifically address the root causes and effects of this problem and its harmful effects on fish populations and marine ecosystems, non-selective fishing practices. Second, Congress must strengthen the national policy in the Magnuson-Stevens Act to *avoid* bycatch in marine fisheries. Finally, amend the Magnuson-Stevens Act to require fisheries managers to establish bycatch minimization standards and schedules to meet those standards.

ESSENTIAL FISH HABITAT (EFH)

The SFA requires councils to describe, identify, and conserve EFH for each managed species. The Act also requires councils to assess the impacts of all fishing activities on EFH and minimize any adverse impacts. Further, the SFA requires NMFS to identify Federal activities that may adversely impact EFH and provide recommendations to those agencies on ways to minimize or mitigate those adverse impacts.

Network Issues

• All of the councils failed to conduct comprehensive assessments of fishing impacts on EFH.
• Every council failed to adequately reduce the harmful effects of fishing on EFH. Only two councils (North Pacific and South Atlantic) adopted any measures to protect EFH from fishing, and those measures do not adequately protect all EFH within each council's jurisdiction.
• NMFS has approved all but one of these inadequate EFH amendments (it recently disapproved the fishing impacts on EFH sections for three of the Mid-Atlantic Council's FMPs). In other cases, NMFS has appropriately disapproved amendments for not assessing the impacts of all fishing activities under a council's jurisdiction, while at the same time approving wholly inadequate assessments of certain fishing activities. For example, it disapproved parts of the Gulf of Mexico's amendment for not assessing all fishing gear, but approved a cursory analysis of shrimp trawling.
• The one bright spot in the otherwise mediocre response to the SFA was the identification of EFH. Across the board, councils engaged in a thorough information gathering process, solicited much public input, and produced documents that should help protect EFH.
• In an effort to appease development interests, NMFS is preparing expedited and consolidated EFH consultation procedures. The Network is concerned that these new procedures will not result in enhanced protection of EFH, as envisioned by Congress.

To address these concerns, the Subcommittee may wish to consider an amendment to the Magnuson-Stevens Act, to *require* regional fishery management councils to act to protect EFH from adverse impacts from fishing. To further encourage councils to take action, amend the Act to prohibit the introduction of new fishing gear or the opening of closed areas to prohibit fishing gear unless EFH damage is minimized. Finally, to ensure that EFH is protected from land-based activities, the Subcommittee could enhance the EFH consultation authority by requiring Federal agencies to ensure that their actions are not likely to adversely impact EFH.

GENERAL FISHERIES MANAGEMENT CONCERNS

Fisheries Data

The Network has several other concerns with Federal fisheries management. One of the most serious is the lack of comprehensive fisheries data. Fisheries management decisions are too often made without adequate information. In many parts of the country, inadequate fisheries surveys are conducted because of a lack of funding. For example, west coast fisheries surveys are only conducted once every 3 years. In other fisheries, managers rely on self-reporting by fishermen. This type of data is often of questionable accuracy because it is used to enforce quotas and assess bycatch; fishers may have a tendency to under report. Finally, not all fishing sectors are adequately assessed, often because of the difficulty in conducting assessments. For example, the catch of party fishing boats—vessels carrying from 20 to more than 100 recreational fishers—is not being quantified. This is a fast-growing sector of recreational fishing whose potentially significant catches must be quantified and included in calculations of fish stock abundance.

The Subcommittee may wish to consider addressing this problem in two ways. First, ensure that adequate funds are available for fisheries independent assessments of fish population size. Fishery independent data is essential to providing unbiased indices of abundance for stock assessments, which are too often based on self-reported fishery-dependent data. Inadequate fishery-independent data is recognized as a major impediment to sound fisheries management. NMFS is attempting to address these problems by purchasing four new fisheries research vessels, funding for the first is contained in its fiscal year 2000 budget request. The Subcommittee should support this request as well as funding for fisheries surveys generally.

Another way to increase funding for fisheries surveys is to earmark a portion of outer continental shelf (OCS) revenues for fisheries data collection. As you know, there are several legislative proposals before the Congress to distribute OCS revenues to states. The Network has not taken a position in support of, or opposition to, any particular bill. However, we would like to encourage you to set aside at least $50 million annually for the collection of fisheries data. Such funds should be available for the conduct of projects in both State and Federal waters. These programs should be undertaken jointly by NMFS and the three interstate marine fisheries commissions. Such cooperative programs will ensure that the data collected is consistent among the states and useful to Federal fisheries managers. An example of such a program is the Atlantic Coast Cooperative Statistics Program which is conducted cooperatively by NMFS and the Atlantic States Marine Fisheries Commission.

The second way to obtain fisheries data is through the use of on-board observers. Observers are essential to monitoring and minimizing bycatch as well as collecting other important fisheries information. Fisheries managers recognize the need for objective observation and data collection to effectively manage marine fish and fisheries. Managers' abilities to address the problems of overfishing, bycatch, and degradation of fish habitat are limited because they do not have accurate and reliable information on a fishing vessel's catch, including bycatch and discards. Observer generated information can provide the statistically significant and reliable information necessary to meet the objectives of the Magnuson-Stevens Act, including monitoring, analyzing, and reporting bycatch and discards, landings, and fishing impacts on EFH.

To address these problems, the Congress may amend the Magnuson-Stevens Act to: (1) establish a mandatory fishery observer program for all federally-managed fisheries; and (2) fund observer programs with a user fee based on value and applied to all fish landed and sold in the United States.

Regional Fishery Management Councils

The regional fishery management councils are charged by the Magnuson-Stevens Act with developing FMPs and FMP amendments for the managed species under their jurisdiction. Therefore, the councils were responsible for developing SFA implementation amendments, and as we pointed out in our report, they all "missed the boat." While much of the blame can be placed at the feet of NMFS for the regulatory and other guidance that it provided, the councils are also responsible for not adequately addressing the requirements of the SFA. The Network believes that the councils' dismal response to the SFA is at least in part due to their composition. Although the councils are charged with the conservation and management of the nation's marine fish, which are held in trust for all Americans, the councils are dominated by representatives of the fishing industry. Interests of the general public, as well as non-consumptive users of marine fish, such as divers, are not adequately represented on the councils.

Marine fish are public resources. Decisions regarding their management should be made in the public interest, not simply the economic interest of a few in the fishing industry. Accordingly, representatives of the public interest must sit on regional fishery management councils.

To address this concern, Congress may wish to amend the Magnuson-Stevens Act to ensure that councils are more broadly representative of the public interest as they make decisions regarding the conservation and management of public resources. Additionally, Governors should be required to consult with conservation groups before nominating individuals to a council.

NETWORK REACTION TO REAUTHORIZATION ISSUES RAISED BY THE COUNCIL CHAIRMEN

The Network has reviewed the reauthorization issues raised by the council chairmen. While the Network is supportive of certain of these suggestions, we have significant concerns with others. Below is a listing of our concerns.

Rescinding the Congressional Prohibitions on Individual Fishing Quotas (IFQs) or Individual Transferable Quotas (ITQs)

The council chairs are advocating, unconditionally, that the moratorium on IFQs not be extended. The Network disagrees and believes that the moratorium should be extended unless Congress satisfactorily addresses all of the Network's conservation principles. Standards must be adopted that, among other things, clarify that IFQ programs: (1) do not create a compensable property right; (2) demonstrably provide substantial new conservation benefits to the fishery; (3) are of limited duration, not to exceed 5 years; and (4) are reviewed periodically by an independent body to determine whether they are living up to these standards.

Regulating Non-Fishing Activities of Vessels

The council chairs have requested additional legal authority to regulate non-fishing activities of vessels that adversely impact EFH. The Network supports this proposal. However, we find it ironic that the councils would ask for additional authority to protect EFH when none of the councils have used their existing authority to adequately reduce the harmful effects of fishing on EFH. To justify their proposal, the council chairs point out that anchor chains can damage 70 acres of bottom habitat. While that is a significant area of impact, it pales in comparison to the area impacted by fishing activities. In New England, scientists from the University of Connecticut have found that the 40,806-square kilometer bottom of Georges Bank is "plowed" by bottom trawls and dredges between two and four times per year. Given the much greater area impacted by fishing activities, we hope that this request for new authority represents a renewed emphasis by the councils to protect EFH.

Observer Program

The council chairmen have asked that they be given discretionary authority to establish fees to help fund observer programs modeled after the authority granted to the North Pacific Council. The Network strongly supports observer programs. However, we differ from the council chairs in that we believe that mandatory observer programs should be established in all fisheries to provide statistically valid and reliable information for monitoring, analyzing, and reporting bycatch and discards, landings, and fishing impacts on EFH. Moreover, we believe that such programs should be industry funded.

ESSENTIAL FISH HABITAT

The Network strongly objects to the council chairs suggestion that the legal definition of EFH be modified in order to narrow its geographic scope. The legal definition of EFH is: "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The key to the definition is how "necessary" is interpreted. The councils and NMFS could have interpreted the area that is "necessary" to be smaller. However, they chose to identify EFH in a precautionary manner and designated fairly large areas as EFH. Given the general lack of information on EFH this is appropriate. As more and better information becomes available, the areas identified as EFH can be narrowed. The definition of EFH does *not* need to be changed for this to happen.

Rebuilding Periods

The Network strongly opposes the councils' suggestion that they be given greater latitude in specifying rebuilding periods and that economic considerations be given equal or greater consideration. As I stated earlier, the councils have fully utilized the latitude provided them by consistently developing 10-year rebuilding plans—the longest allowed under current law. Allowing the councils greater latitude and placing greater emphasis on economics will result in extending rebuilding periods even longer. Extending rebuilding periods beyond that which is biologically feasible, thus allowing overfishing to continue in the short-term, increases the chances that overfished stocks will not be rebuilt. Instead of easing economic hardship, it prolongs it. The best way to minimize the economic impact of fisheries conservation measures is to insure the long-term stability of fish stocks. Extending rebuilding periods past the current limit of 10 years will perpetuate the boom and bust cycles that have characterized our fisheries.

Redefine "Overfishing"

The council chairs have stated that they believe that there are a number of problems with basing the definition of overfishing on maximum sustainable yield (MSY). While the council chairs have not made a specific proposal to modify the definition of overfishing, we are concerned that they seem to be blaming the use of MSY for

the large number of fish that are defined as overfished. This is akin to shooting the messenger when you don't like the message. The Network opposes any changes to the definition of overfishing. The National Standard Guidelines allow the use of "alternatives to specifying MSY" when data is insufficient to estimate MSY directly. In addition, deficiencies in the data upon which MSY based can, and should, be addressed through the use of uncertainty buffers. Under such a system, MSY would be lowered to guard against uncertainty, thus protecting fish stocks from being overfished because of errors in estimating MSY.

Thank you for allowing the Marine Fish Conservation Network the opportunity to discuss implementation of the Magnuson-Stevens Act. The Network looks forward to working with the Subcommittee as it reviews implementation of the SFA by NMFS and the councils, and develops legislation to reauthorize the Magnuson-Stevens Act. I am prepared to answer any questions members of the Subcommittee may have.

Senator SNOWE. Thank you.

I want to thank you all of you for your testimony.

Mr. Hinman, let me just begin with you. You say that no council has defined EFH's, essential fish habitats, you are saying adequately or what?

Mr. HINMAN. No. Actually, we complimented them on their identifying and defining EFH.

Senator SNOWE. They just did not define it appropriately or the scope of it?

Mr. HINMAN. It was their actions to protect EFH from the effects of fishing activities in particular that most disappointed us. Because, in nearly all cases, they did not take any action. That is probably the single thing that the councils, under their authority, can do to protect habitat, is to regulate fishing impacts.

Senator SNOWE. But you admit that they probably do not have enough information or accurate data to make those decisions, and that there would be obviously the problem that has been already raised, about being almost too broad? Now, you might not think so. You might think that is fine. But in the event that it is too broad and it does have an impact on an industry, should not there be an ability to sort of narrow the scope of the area, the geographic area?

I think NMFS is attempting to do that in its own way.

But would it require more information, more data? I will ask Mr. Swingle to comment, too, since he serves on a council, on how they have handled that issue. But what would you recommend, short of something that is wrenching to the industry? Obviously, this is a new area and one that should be appropriately addressed—no question about it.

Obviously, I think we have to look in the entire area, and habitat is very important to the survival and the health of the species. But it also could entail being a much broader area that creates other problems.

Mr. HINMAN. What we wanted was at least a good-faith effort on the part of the councils to address this problem. I think, in some cases, there is information available that was overlooked. There is certainly truth to the fact that in a lot of cases better information is needed.

Unfortunately, the councils in most cases did not even take the trouble to assess those situations, to try to draw together a plan on how they were going to obtain that information that was necessary to make these decisions. So I do not think they even made a good-faith effort, and they really tried to duck this issue.

I do not know that this is a matter of the scope of the definition of EFH. I think it is a matter of determining the impacts of the fishing gear on specific habitats. If those impacts are severe enough that they are having detrimental impacts on the resources, this is not just a resource issue. It becomes a fishery management issue and a fishing industry issue.

Many members of this Network that I am speaking on behalf of today are commercial and sport fishermen and associations on both coasts, who agree with us and feel very strongly that the EFH implementation did not go far enough and it was not aggressive enough, because their incomes, their jobs and their industries depend on that habitat.

Senator SNOWE. Does the EFH definition in the current Act allow for the consideration of the impact of fishing gear on the habitat?

Mr. HINMAN. It requires consideration of the impact, yes.

Senator SNOWE. So the councils have the ability to include that?

Mr. HINMAN. Yes.

Senator SNOWE. Did any of the councils?

Mr. HINMAN. There was some cursory attempts to do that, yes.

Senator SNOWE. Mr. Swingle, the Gulf of Mexico Council approached this issue.

Mr. SWINGLE. Yes. I would like to point out, the litigation that is going on really is from the American Ocean Campaign and the same charge is made against the Gulf Council, the New England Council, the Caribbean Council, the Pacific Council, and the North Pacific Council, of being delinquent in their duty of regulating gear that might affect the habitat.

I think part of the problem is the group that Mr. Hinman represents is not aware, at least, of what has been done in the past in that type of management. Having been, the State Fishery Director of Alabama, we regulated the use of trawls in a large number of areas to protect habitats or to protect other resources. That has always occurred at the State level.

Our council has drawn a zone from the Florida Keys to the Mexican border, in which three types of gear are prohibited. One of these is roller trawls, which I guess they call rock hoppers in the New England area. So, overall, there is probably about on the order of 40,000 square miles where that gear is prohibited. We also establish habitat areas of particular concern under our council, where bottom-type gear was prohibited for operating in that area because it might damage coral or other resources. I am sure that those types of actions over the 22-year period of the councils were taken by other councils.

So I do not think, really, Mr. Hinman's group has really gone back and assessed all the amendments done by all the councils to really establish what has or has not been done.

Mr. HINMAN. Yes, I will respond to that.

Senator SNOWE. Mr. Hinman.

Mr. HINMAN. Actually, I am aware of things that were done prior to the implementation of the Sustainable Fisheries Act. I am also aware that the Gulf Council, when it was not required to, I think it was one of the earlier movers in putting together a habitat committee and addressing habitat issues. But that is not the issue.

The issue is that since passage of the Sustainable Fisheries Act and the requirement to take a more vigorous and more aggressive approach to protecting habitat from these kind of threats, the councils chose to rely on past actions as adequate and sufficient in meeting the requirements of the Act. We do not believe that they are. There were still a lot of problems and a lot of threats outstanding. There was not a good-faith effort to address those.

It kind of reminds me of when the Ecosystems Advisory Panel, when we took Congress' first step of trying to assess, to the extent ecosystem principles were being applied by all of the councils, we requested from the councils, OK, what are you doing, how are you applying these principles? Almost to a one, they all came back trying to characterize almost all kinds of management that they were doing as ecosystems management. It was really just trying to pass off what has already been done as being adequate and that we really do not need to do anymore.

We always end up coming out as if we are just focusing on the negative. But the negative is the problem. We do not need to sit here and congratulate the councils for the things that they have done in the past. What we want to do is to make sure that the things that still remain to be done, that still are very important to our fisheries and to rebuilding them, are done.

Senator SNOWE. Mr. Delaney, you referred to the fact that the rules and regulations that are implemented by NMFS do not reflect oftentimes the intent of the agreements that have been negotiated by you as a Commissioner to ICCAT. Could you further elaborate and give us examples as to which areas there is a disconnect between the agreements and the rules and regulations that are ultimately promulgated by the Department?

Mr. DELANEY. Yes, I will. I appreciate that question.

As I said, when we are negotiating internationally, we have to account for the protection of the resource as well as the best interests of U.S. fishermen. We have to be thinking simultaneously about the effect of our conservation recommendations on the fish and the effect on U.S. fishermen. We often discuss among the Commissioners our specific intent as to how a measure should be applied, how will we apply this to our own fishermen, before going forward with making a commitment and obligating the United States in the form of an international agreement at ICCAT.

It is with that understanding, that confidence, that we protected the interests of U.S. fishermen, that I feel I can go forward in negotiating and obligate the United States into that agreement.

Unfortunately, I have observed a number of cases where those very explicit discussions have taken place which were not ultimately reflected in plans and regulations. I jotted down a few.

In 1997, we had a very specific understanding of how a particular ICCAT vessel monitoring system would be applied to the domestic pelagic longline fishery. The agreement for the pilot program was that it would apply to 10 U.S. vessels or 10 percent of the U.S. high seas fleet. This is the fleet that fishes offshore, beyond our exclusive economic zone. The contrary result was that NMFS required equipment to be installed on 100 percent of the fleet, both inshore and offshore. The result is another lawsuit.

Another example is with regard to bluefin tuna, which is close to home for you. We just went through a process in 1998, where our agreement on the rebuilding of bluefin tuna resulted in a net increase of 43 tons for the United States. Our discussions among the Commissioners was that these 43 tons should be appropriately distributed in a proportional manner among each of the different U.S. gear sectors, as were other provisions that we agreed to that year. The result was that one particular gear group was singled out for not receiving any of that tonnage, and the remaining was distributed among all the other gear types.

I am not here to advocate for any particular gear group. The point was that it was a very, very explicit discussion that was not reflected in the plan. It had to go through a rather elaborate process afterwards to clarify that intent. Another lawsuit was filed. I think the problem will ultimately be resolved, but what an incredible waste of time, energy and money.

We need a process that documents the Commissioners' intent so that we feel comfortable that when we go to ICCAT and make those commitments, that will be the way it is carried out back home. Perhaps there needs to be a Commissioners' report, some analogy to legislative history that you produce in the legislative process. I would like to work with your Committee on that.

Senator SNOWE. Do they seek your input?

Mr. DELANEY. Actually, the Sustainable Fisheries Act does have a provision, in 304(g) I believe, that does require consultation with the U.S. Commissioners in the development of plans. I have to say that in my own personal experience, although I often offer my own unsolicited opinions on different issues before the agency, I have never had my opinion as a Commissioner solicited in terms of how to develop a plan or a regulation that was implementing an ICCAT agreement—never. The process does not exist.

Senator SNOWE. How long have you been Commissioner?

Mr. DELANEY. I am going into my fifth-year cycle, 5 years.

Senator SNOWE. They have never solicited my opinion?

Mr. DELANEY. No. But, in fairness, I have given my opinion unsolicited. [Laughter.]

Senator SNOWE. Well, it is a good thing you are assertive.

Mr. HINMAN. I can attest to that.

Mr. DELANEY. But there is no process set up for it whatsoever.

Senator SNOWE. There is no process, and obviously there should be. It is unfortunate that it even has to be required or that it is necessary. But it does not make sense. If you are spending all your time representing the United States in negotiating these agreements and it is not reflected in how it is implemented at home, it just clearly does not make any sense.

Well, that is something we will work with, in the reauthorization process, to ensure that communication takes place, if we have to require it. I think it is regrettable that it is even necessary, but it may well be. Because it is not right, nor fair, and it puts our fishermen at I think a competitive disadvantage, in the final analysis.

Mr. DELANEY. Indeed. Thank you.

Senator SNOWE. Yes, Mr. Hinman?

Mr. HINMAN. Yes, I wanted to comment on that, if I might. There is one aspect of consistency with the Sustainable Fisheries Act and

international fisheries management, in this case, under ICCAT, that I would like to address. That is the requirement in the SFA to minimize bycatch.

Bycatch is a serious problem in our highly migratory species fisheries. It is also a problem that must be—not just legally, but as a practical matter—must be addressed domestically. ICCAT cannot tell us how to modify our gear, what areas to close, how to change fishing practices, how to reallocate quotas. It does not do that. Those are domestic decisions. This is a problem that we have to address ourselves.

It is also something that has been undermining the effectiveness and the recommendations of ICCAT, because we have not dealt with it sooner. There are ICCAT recommendations on minimum sizes, where because we have not dealt with non-selective fishing practices, we end up discarding all those fish that we are meant to protect. We also have fisheries where ICCAT recommendations applying to landings are meant to control mortality in the billfish fisheries, where a great majority of the mortality is bycatch mortality. Because we have not addressed that, we are not controlling that mortality.

I do not believe that such measures are inconsistent with management under ICCAT or ICCAT recommendations. In fact, they are very consistent, and will help achieve ICCAT recommendations without disadvantaging U.S. fishermen. They are also something that only we can do. We cannot push that kind of decision making and resolving that problem into the international arena.

Senator SNOWE. Mr. Swingle, again, can you respond to the issue of the bycatch in the definition that is in the current Act? As you heard from Mr. Hinman's testimony, he is saying none of the amendments that have been submitted to numbers by the council contain any new measures to reduce bycatch—according to his testimony.

Mr. SWINGLE. In the case of ours, that would be correct. What we did is operated outside that amendment and went forward with an amendment, prior to submitting our Sustainable Fisheries Act amendments, that addressed bycatch in the shrimp fishery for the area from Apalachicola, FL to the Mexican border. We required bycatch reduction devices in the trawls used in that fishery. That was implemented in May 1998.

We are currently developing an amendment to the shrimp plan, again, to address bycatch for the Eastern Gulf of Mexico. That one probably will be implemented next year.

We did evaluate the extent of bycatch for all of our fisheries. A lot of them, basically, have almost none—like the spiny lobster and stone crab fisheries. Probably the biggest problem that we may have is in regulatory discards, that we have created. In requiring minimum size limits, we have created bycatch, or regulatory discards, levels that, for instance, in the recreational fishery for red snapper are on the order of 60 percent of all fish caught are thrown back overboard. In the case of the two major grouper fishes off Florida, the recreational sector is throwing back 85 percent of the fish.

So all of this results in some release mortality. We are not quite sure how to address alleviating those levels of regulatory discards

in those fisheries. It does not really matter if that return rate is that high as long as the fish survive. But the survival of the fish is a function of the water depth that they were taken from. The deeper the water, the less the survival rate is.

So we are not quite sure how to address those issues. We may at some point in time, the ideal system would be that if you fish beyond 20 fathoms, you kept all your fish, regardless of what size they were. If you fished inshore, then you would have to return all undersized fish because they would probably survive. But that has a lot of complications in that type of system, as well.

Senator SNOWE. Mr. Delaney.

Mr. DELANEY. Since the issue of bycatch in the context of ICCAT was brought up by Mr. Hinman, I would just like to clarify a couple of points. First of all, ICCAT does address the issue of bycatch. I would first note that we do have what I believe is a failed policy at ICCAT to try to protect juvenile fish, regardless of the species. We have it almost across the board where we have minimum sizes. Minimum sizes, we found, are just not internationally enforceable.

So, increasingly, ICCAT has started to focus on alternatives to reduce the bycatch of small juvenile fish. This is on the strong advice of our scientific committee, the SCRS at ICCAT, which has urged us, in almost all species, to reduce the mortality of juvenile fish in order to help us restore and rebuild the stocks.

The alternative that we are finding more and more attractive is the development of time-area closures. Rather than have the policy of regulatory discards, which is exactly what I just referred to as minimum size requirements—which I find to be totally inconsistent with the National Standard to reduce bycatch while simultaneously requiring bycatch and discards, it is an inconsistent policy that needs to be addressed. But, again, the alternative that we are looking at is time area closures. Already, ICCAT, contrary to what Mr. Hinman said, has moved in the area of bycatch, by restricting the use of different gears for different times and areas, particularly in the Gulf of Guinea, which we have identified as a mass nursery area for a number of the important tuna species that are managed by ICCAT.

Interestingly, the U.S. swordfish fleet, pelagic longline fleet, is working very closely now with the recreational stakeholders in pelagics and highly migratory species to develop a very large time area closure proposal in the U.S. EEZ that would address small swordfish bycatch, and also billfish bycatch and the bycatch of other species, as well. So that is the direction that our industry and ICCAT prefers to the concept of regulatory discards, where fishermen are forced to waste fish.

They cannot avoid the catching of the fish with the type of gear that is employed. I know there are questions about non-selectivity of the gear, but the reality I face at ICCAT is that pelagic longlining is the gear that is used throughout the world, throughout the globe. That is what I have to deal with, that reality, and other types of gear, as well.

So that is the direction I would like to see things go. ICCAT does have the capacity to do that. I still think the United States should take approaches that are consistent with international approaches, so that we do not disadvantage our own fishermen by taking ac-

tions that are more adverse to their interests than what are being pursued internationally.

Senator SNOWE. Well, to that point, Mr. Hinman, what would you recommend, banning fishing gear having an impact on bycatch, in reference to the point that he made with respect to swordfish?

Mr. HINMAN. Right. As a preface to answering that very specific question, I did want to—I thought it was very ironic that the U.S. swordfish industry and ICCAT have come around to realizing that the minimum size in the swordfish fishery is not effective and results in regulatory discards when those were the only two bodies in this country, in this world, that in 1991, when that was made a regulation, thought otherwise, thought that this would be effective, thought it would protect juvenile swordfish. Everybody else said this is just going to result in discarding these fish.

The other thing is that this alternative to the minimum size is not a recent thing. In that very first recommendation on the minimum size, ICCAT included a recommendation that countries take other actions, including time and area closures to protect juvenile fish. The U.S. swordfish industry resisted doing that. If they are now talking this year seriously about that, I think that is great. But that is 7 years later, when we have already discarded 30,000 to 40,000 juvenile swordfish every year in the duration because this measure does not work.

Also, I think it points up both what Mr. Swingle and Mr. Delaney said about—the regulatory discard issue points up—the need to address the root cause of bycatch, which is non-selective fishing practices. It is not just dealing with economic discards and finding markets for them. It is not just dealing with regulatory discards and changing the regulations in order to allow them to keep them. I mean, is that the answer?

If the mortality is what we are trying to reduce—and that is very often the case in the serious bycatch problems—we have to change fishing practices. That has to be dealt with. Just focusing on the discard issue, and whether it is regulatory or economic, is not bringing us to that answer.

As far as the specific question of what would I do, ban this gear, I am speaking here today on behalf of the Marine Fish Conservation Network, which does not have a position on that, other than that appropriate measures should be taken, under the Magnuson Act to minimize bycatch in the U.S. longline fisheries, and that there are proposals out there, that have been made for years and that are being discussed at this time, to enact time and area closures and some other measures. We are hoping that they are going to be implemented, implemented soon, and that they are not just token measures, but they will solve this problem.

Senator SNOWE. Well, I appreciate your testimony. Obviously, we will be following up with each of you on a number of these issues as we go through the course of this reauthorization. But I think it has been very helpful to hear the respective views, even if some of them are divergent. It obviously provokes discussion and ideas in terms of what we need to focus on as we pursue the reauthorization in the course of the next few months.

So I really do appreciate your presence here today and for traveling here, to be here. So I thank all of you.

This concludes the hearing. But before I do adjourn, I would ask unanimous consent that the hearing record remain open for 10 legislative days, so that the Subcommittee may accept additional testimony, questions from Senators, or any other information that the Subcommittee may want to include in the hearing record.

Without objection, so ordered.

The hearing is adjourned. Thank you.

[Whereupon, at 1:30 p.m., the hearing was adjourned.]

APPENDIX

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. OLYMPIA J. SNOWE TO THOMAS R. HILL

Question 1. The National Marine Fisheries Service (NMFS) and the Councils have begun to identify a subset of essential fish habitat (EFH) called "habitat areas of particular concern." This subset targets critical areas such as places of spawning aggregations. Should these "habitat areas of particular concern" be the true focus of NMFS's implementation of EFH? Please explain.

Response. The statutory definition of essential fish habitat (EFH) is "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity" (16 U.S.C. 1802 § 3). Based on the guidelines provided by the National Marine Fisheries Service (NMFS) in the Interim Final Rule (FR 62(244):66531—66559) and the information available to the Councils and NMFS, EFH was designated rather broadly in most cases. The broad designations resulted in EFH designations covering large expanses of area, from the coastline out to the limit of the exclusive economic zone (EEZ). These broad designations, while not necessary ideal, were necessary to meet the statutory definition.

The advantages of the broad designations include ensuring that all habitat necessary to a fish throughout its life-cycle is included and addressed and giving the Councils and NMFS discretion over the focusing of their attentions to areas known to be particularly important while not neglecting other areas that may also be important. There are some disadvantages, however, including the "watering down," so to speak, of the perceived importance of the EFH designations. It is also difficult to address all impacts to EFH when most of the coastline and EEZ are designated as EFH.

In the Interim Final Rule, NMFS suggested that where sufficient information exists fishery management plans (FMPs) identify "habitat areas of particular concern" (HAPCs) within EFH. The Rule goes on to describe several criteria that should be met for an area to be considered for an HAPC designation. The New England Council's interpretation of the intent of the HAPC designation is to identify those areas that are known to be important to species which are in need of additional levels of protection from adverse impacts.

In most cases, there is not sufficient information regarding the ecology or effects of impacts to warrant an HAPC designation. In fact, the result of an evaluation of information on all eighteen New England Council-managed species was that only two HAPC designations were made as part of the Council's omnibus EFH FMP amendment. These two HAPC designations were limited to a small portion of the northern edge of George's Bank, based on the documented importance of habitat found in this area for recently settled juvenile Atlantic cod, and several rivers in Maine, based on the important genetic legacy held by the remaining native Atlantic salmon that utilize those rivers.

While these areas are known to be particularly important for these two species, they are not the only areas or habitat types believed to be necessary for the fish to spawn, breed, feed or grow to maturity (e.g., the juvenile Atlantic cod HAPC does not address areas important for cod eggs, adults, or larger juveniles). Also, there has not been enough information to identify similarly important areas for the other sixteen species managed by the New England Council. As more research is conducted, we may someday be able to identify additional HAPCs for other species. This does not, however, preclude the need for or appropriateness of the current EFH designations. As more information becomes available, the New England Council envisions revising its EFH designations. In many cases, this will involve a refining of the EFH to include smaller areas. This activity will most likely be accompanied by the designation of additional HAPCs—places either more important to a critical life history stage (an ecological "bottleneck") or threatened by an activity with a specific adverse impact.

Essentially, the HAPC designations, in conjunction with the EFH designations, provide a tiered prioritization for Council and NMFS action and attention. The EFH

designations serve as the backdrop of the Council's habitat management program, identifying the range of habitats and areas important in some way to one or more life history stages of one or more species. These designations demonstrate the importance of much of the ocean waters and substrates to a variety of species. They also serve to indicate that activities that affect habitat may have wide ranging effects and implications for commercially important species. The HAPC designations, layered on the EFH designations, serve to identify particular places either critically important for the survival of fishery species or particularly sensitive to the effects of human activities.

Using this tiered approach, the Councils and NMFS may identify areas where certain activities should not occur at all (HAPCs), other places where they can occur if certain criteria are met (EFH), and other places where they can occur unrestricted (everywhere else). HAPCs should not replace the EFH designations but, in conjunction with them, can make stronger NMFS's and the Councils' implementation of the EFH process intended by the Congress.

Question 2a. Since the date of the hearing, the Secretary raised the cod trip limit from 30 lbs. to 100 lbs. per day. The 100 lbs. limit will be effective until Framework 31 is approved. As part of Framework 31, the New England Fisheries Management Council has recommended a 400 lbs. per day limit.

Do you believe that raising the trip limit to 400 pounds per day will alleviate some of the adverse impacts which occurred under the lower trip limits?

Response. Raising the trip limit will alleviate some of the adverse impacts of the lower trip limit. The following summarizes the impact of Framework 31:

It will not have a significant impact on the annual fishing mortality rate of Gulf of Maine cod, even if you assume that cod not landed under the lower trip limit is "saved";

It will result in positive net revenues to the vessels in the Gulf of Maine of approximately $500,000;

It will mitigate some of the social impact of forced discards that was manifested in the outrage expressed by fishermen at Council meetings and in their correspondence;

It will improve the data used in assessing stock status, by allowing for a better accounting of fishing mortality since reliable data on discards is unavailable;

It will forestall a discarding problem on George's Bank cod and avoid a repetition of the situation that occurred in the Gulf of Maine;

It will close a loophole in the trip limit/days-at-sea system that enables vessels to target cod, land large overages of the trip limit and run their days-at-sea clock to account for the overage. This strategy is not only counter to the intent of the stock-rebuilding program, it distorts the data on overall fishing effort because some vessels use allocated days-at-sea that they otherwise might not use.

Question 2b. Do you believe that sensible trip limits are the only measures needed to provide adequate protection for cod stocks or are other measures necessary?

Response. No, trip limits, appropriately set, are only part of the management program needed to protect and rebuild cod stocks. The management plan in place for the multi-species fishery includes days-at-sea controls, gear restrictions (mesh size, modified trawl configurations, and limits on the number of hooks and gillnets fished), and area closures. Other methods not currently in use in this fishery such as quotas (TACs), are also effective in controlling mortality in fisheries around the country.

The current strategy has proven successful for some of the multi-species stocks in the relatively short time since Amendment 7 was implemented where nature has cooperated with good recruitment even though some of those stocks were at critically low levels only four years ago. The delay in rebuilding of cod stocks can be attributed to several factors, including poorly designed management measures which allowed the fishery to exceed it mortality rated by 50% to 200% for several years in a row, (which will be addressed by the Council with Framework 31, the upcoming annual adjustment framework and Amendment 13), poor recruitment, and record-low survival of pre-recruits. These latter two are outside of the direct control of the Council.

Question 3a. NMFS has been criticized for its lack of compliance with the Regulatory Flexibility Act. Other agencies, such as the Environmental Protection Agency, are required to convene small business advocacy review panels for each rulemaking that will have a significant economic impact on small businesses.

Please explain the impact that inadequate consideration of socio-economic factors has had on fishing communities that you represent.

Response. The Council has been criticized for not considering socio-economic impacts on the fishing communities, however, another frequently heard criticism is

that the Council spends too much time considering these factors to the detriment of conservation.

The underlying problem is that when fish stocks are severely depressed, the need to substantially reduce fishing levels to meet National Standard 1 of the Magnuson-Stevens Act requires large fishing reductions that cannot avoid having severe negative short-term impacts on fishing communities.

No consideration of socio-economic issues fundamentally lessens this problem, however, the Council can ensure that the burden of achieving conservation goals is fairly distributed. This is not easy in a climate of despondency over Magnuson-Stevens Act stock rebuilding guidelines, severe cutbacks in fishing and uncertainty about the future. All meaningful actions are criticized by any group negatively impacted.

The Council fully understands that mandated fishing reductions, often greater than 50%, will reduce good-paying jobs both on the water and shoreside, and will damage fishing community economic independence and well-being in the short-run. In the long run, responsible action will preserve these benefits to the greatest extent possible.

The Council spent years developing limited access and fishing effort reduction plans for the major fisheries for groundfish, scallops and monkfish, not to mention the foundation for the current state-federal lobster management efforts. None of these efforts have been popular, but there's recognition that not addressing overfishing would be not only worse, but irresponsible.

During the development of all Council plans there has been extensive public and scientific debate over the efficacy of quotas, mesh regulations, area closures, gear limitations, limited access, days-at-sea reductions and other proposals. As a result, the Council believes that it has given great consideration to socio-economic factors in selecting management alternatives. Major management problems, however, have no widely accepted solutions that simultaneously meet Magnuson-Stevens Act goals and avoid severe short-term impacts on fishing communities.

Many of the provisions that appear to make fishery management plans too complicated have been implemented to allow flexibility to different types of fishing activity.

Question 3b. Please explain in detail how a similar panel process, such as the one utilized by the EPA, could aid NMFS in bringing economic impact analysis to the forefront of fisheries decision-making.

Response. Unlike many businesses affected by EPA actions, almost all fishing operations and shore-side businesses are small business entities, the focus of the Regulatory Flexibility Act. As a result, all scoping meetings, public hearings, and the extensive array of meetings of the Council, industry advisory panels, species committees, stock assessment workshops, plan development and monitoring committees, and ad-hoc workshops provide opportunity for regulated small entities to participate in the decision-making process to a much greater extent than panel processes of most federal regulatory agencies. In 1998 alone, the Council held or was represented at an estimated 200 meetings that provided affected user groups opportunities for participation.

Council procedures require biological, economic and social impact analysis, to the extent that information is available, of all management options under consideration. These analyses are mandated to be available to the public for review and comment before the Council votes on any course of action. Additionally, 10 of 17 voting Council members have insights into to the economic impacts of management measures as a result of their personal experience in the commercial and recreational fishing industries.

The most difficult problem facing the Council is not making use of socio-economic analyses but solving allocation disputes among competing interest groups.

The Council is expanding the Stock Assessment and Fishery Evaluation Report to include economic impact analyses and industry management proposals. The report provides impacted entities with scientific information, proposed management options and impact analyses as early as possible in the management process.

The New England Council has long supported increasing the collection of and improving fisheries and economic data. It recognizes that the many analyses are limited by the data currently available. It has tasked its newly formed Social Sciences Advisory Committee, comprised of independent economists and other social scientists, to report on how to improve social, economic and community impact analyses. The committee will present the report to the public at the November 16–18, 1999 Council meeting.

Question 4. The New England Fishery Management Council has been criticized for its inability to manage meetings in a civilized manner. This has created an envi-

ronment in which people may be too uncomfortable to actively participate. As a result, some proposed management measures may not receive adequate consideration. Please comment on your experiences at Council meetings in this regard.

Are there examples of effective management proposals that have been set aside in favor of inadequate, but more popular measures?

What has been the result of such decisions?

Response. It is true that over the course of the last two years, there have been several unfortunate outbursts by a few members of the fishing community at New England Council meetings. I would characterize these incidents as outside of the norm, though I would be the first to admit that fisheries management in New England is a lively environment. Most Council meetings in the past have been, and will continue to be conducted in a business-like and orderly manner.

I will emphasize, however, that as the new Chairman, I have made a strong commitment to Council members to establish an environment that ensures public opportunity to comment, but retains the dignity of the Council. Additionally, we have scheduled a special closed meeting of the Council at the end of October to review our meeting procedures, address problems and develop an improved process where necessary.

I do not believe that the Council has made any management decisions that involve setting aside an effective proposal in favor of one that is "more popular". The Council may have not acted on any number of proposals that would clearly get the job done because they were associated with very serious negative economic and social impacts on some fishermen and the communities in which they reside, or required allocation decisions which the industry and the Council collectively could not agree. Instead, the Council has consistently sought to craft management measures that would be effective in addressing resource conditions while minimizing those impacts. I must point out that a number of communities in southern Massachusetts have been far more negatively affected than most other areas in New England as the result of the Council's actions.

In some cases, the management measures selected by the Council may not have been as effective as others, but in all these instances we have developed additional measures to address any outstanding problems. Again, no simple straightforward solutions have been available, and the Council has sought to balance resource conditions and the economic and community impacts that accompany our actions. I believe it is important to point out that despite some errors, the Council remains on target with its ten-year rebuilding programs for most stocks.

Question 5. Some groups have criticized the New England Council for not using information and recommendations submitted by its advisory committees. Please explain how the Council should use the recommendations of such committees in the decision-making process.

Response. The Council not only uses its advisory panels, but also solicits proposals directly from industry when developing yearly adjustments to all our fishery management plans. The chair of each panel brings the recommendations of the respective panel directly to the Council for consideration. Their advice is considered, particularly in the context of whether its recommendations meet the management objectives of the action contemplated. If the panel's recommendations do not meet the objectives, the Council is not likely to adopt their proposals. In the case of the Atlantic Herring and FMP for Scallops, however, the advisory panels were very active in the development of the plan, and worked with the plan objectives as guiding principals. As a result, many of their recommendations were incorporated into the final FMP.

Question 6a. Some question whether it is appropriate to continue to use Maximum Sustainable Yield as the target for fisheries management. Please explain whether you think that there are any modifications to the management process, which would make MSY a reasonable goal.

Response. The Councils may need more flexibility to adopt responsible biological goals, when setting biomass targets and yield objectives in a multi-species complex. The potential targets and objectives could be identified as ranges, rather than a single target at an optimum biomass level (B_{MSY}). Allow for this would help Councils to accommodate natural variability and allow them to set biomass targets that are consistent with aggregate stock combinations.

Others species, on the other hand, may add value by maintaining a low, but still risk adverse, biomass level. The current law does not allow this flexibility. It allows the Councils to set optimum yield (OY) for a group of interrelated species, provided that the policy does not exceed MSY for any one species.

Species falling into this category could have low recreational and commercial value, compared with other species in a fishery. To maintain this species at MSY

conditions (i.e. above B_{MSY}), it might require another more valuable species to be underutilized or worse yet unavoidably increase regulatory discarding. The species may also play a role in the productivity of other more highly valued species and therefore it would be preferable to keep a predator with low value at lower biomass levels yet not risk stock collapse. In this case, a rebuilding program might also force a Council to shut down a commercial species with low value for as much as ten years to achieve the rebuilding objectives. A domestic fishery that relies on foreign market may have little prospects for recovering in ten years, once the rebuilding objectives are met. In our experience, spiny dogfish may be a case in point.

In another respect for some species, for example, it might be preferable to maintain a high biomass (i.e. a large population with large fish) to support recreational fisheries. The current law allows Councils to achieve this goal, but it does not achieve the maximum yield in purely biological terms (i.e. MSY).

Question 6b. Please outline alternatives to MSY as a target for management.

Response. I support setting biomass targets that achieve sound, risk adverse, biological targets. I also support setting maximum fishing mortality thresholds that prevent unsustainable or risk-prone fishing. Yield goals in this case, would be allowed to vary and accommodate natural variation and long-term trends. MSY, on the other hand, is actually an estimate of the maximum productivity of a resource where catch balances the maximum surplus production when the stock is at optimum biomass levels.

Basing management decisions purely on achieving MSY (or some high fraction of MSY) could be a risk-prone strategy. One example of this is a problem the New England Council is now considering, that is the question of fishing capacity. Thus, if the Councils use MSY as an objective, mistakenly believing that stock biomass is at the optimum level when in fact it is not, then on average stock biomass will decline whether biomass is above or below the optimum level. In either case, surplus production declines and is less than MSY. If the MSY policy continues while the stock is declining, believing that the stock will naturally recover, the MSY-based management policy could reduce the biomass to still lower levels and require a new rebuilding program.

MSY management objectives could, therefore, give people a false sense of stability, even though natural variation requires that yield change to balance the resource's dynamic productivity. In lieu of MSY, the Council prefers a maximum fishing mortality threshold that prevents long-term unsustainable policies and a biomass target, set as a range, which allows flexibility to meet risk adverse social and economic objectives. With regard to rebuilding objectives, it would be preferable and easier to predict short-term goals (i.e. a percent increase in stock biomass over one, two, or three years) rather than achieving a theoretical optimum biomass levels ten years out during a rebuilding program. The latter policy (the one now required by law) causes the Councils to set current management regulations based largely on recruitment that is highly variable and often measured with high uncertainty. The current policy can cause short term negative effects to achieve uncertain long-term goals. The uncertainty in the long-term objectives can also make management policies that depend on achieving them unsuccessful in the long run.

Question 6c. How do you view ecosystem management as it relates to the management of species at maximum sustainable yield?

Response. As indicated in the question above (6a), the current law may prevent the Councils from implementing some policies intended to achieve ecosystem management objectives. At the present time, it is very difficult to implement ecosystem management due to sparse information that directly relates to current conditions. Ecosystem management is rich in theory based on equilibrium principles, but there is insufficient data to make ecosystem-based management decisions that respond to dynamic conditions.

At present, we have single-species MSY estimates since there isn't sufficient information to relate the productivity of one species to the abundance and productivity of many other predators, competitors, and prey and include the interactions between them. Such a system would require an intensive, real-time data collection system to identify the interrelationships and the potential outcomes from management of dynamic conditions. Just quantifying the impact of predatory species like striped bass, cod, and sharks has proven very difficult.

On a more pragmatic basis, achieving MSY for all species in an ecosystem may not be possible. Due to natural variation, some proportion of those species will be at low biomass levels due to natural events and require rebuilding. The programs needed to rebuild some of these species could require other more abundant species to be underutilized, especially with the added objective of minimizing discard mortality. As a result of the complex dynamics, it may be unrealistic to continuously

achieve MSY for any individual species much less than for all species simultaneously. This and the undefined interactions between related species, means that MSY for a group of species must be less than the sum of MSY for each species considered individually.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ERNEST F. HOLLINGS TO THOMAS R. HILL

Question 1. Due to the Magnuson-Stevens Act's requirement that Council members be knowledgeable or experienced regarding the fisheries within the Council's geographic area of responsibility, Council members may have a personal or financial interest in the fishery that they are managing. Over the years, the Magnuson-Stevens Act has been revised to require that Council members disclose any financial interests in the harvesting, processing, or marketing of fishery resources under the Council jurisdiction held by that person, any relative, or partner or recuse themselves from voting on Council decisions that would have a "significant and predictable" effect on any personal financial interest.

Have the conflict of interest provisions we enacted in the 1996 Sustainable Fisheries Act solved the problem or is there more work to do?

Response. There is more work to do. Without a doubt, the Regional Fishery Council concept is the best way to manage fisheries. The Council process enlists the help of credible community organizations, fishermen, and the public, publishes its procedures for all to understand, listens to all input and maintains a consistent process. More work needs to be done with the Council member appointment process. The Council membership is supposed to reflect different sectors of the industry and consider what's the best for the fisheries resource and the nation as a whole. The industry perception of what happens at Council meetings is quite the opposite.

Question 2. Some have suggested not allowing individuals with current fishing interests serve on the Councils. Do you support such a change? How would it affect the quality and function of the Councils?

Response. I do not support such a change. However, I do believe that significant improvements in the membership, function, and effectiveness of the Councils can be achieved by changing the make-up of the voting members. I suggest that the Council voting membership consist of greater diversity of representation by scientists, managers, public policy experts, fishermen (recreational and commercial), and environmentalists. I believe the broader member make-up would facilitate better decisions, which are not based on parochial interests but rather on knowledge and experience. Major decisions would be evaluated not only on community impacts, fairness, enforceability, and bycatch, but also on whether the decision adds to or takes away from the public interest.

Question 3. How are non-fishing interests such as environmental interests represented on the Councils? Is that representation adequate?

Response. The New England Council has representation by the environmental community. We have a voting Council member who is an employee of the Environmental Defense Fund. An employee of the Wildlife Conservation Society chairs our Science and Statistical Committee. An employee of the Conservation Law Foundation chairs our Social Sciences Advisory Committee. Lastly, we have assigned another employee of the Conservation Law Foundation to several of our advisory panels. As addressed in the above question, I believe this group, as others should have representation on the Council. At present, we have one Council member representing an environmental interest out of a total of seventeen voting members.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN F. KERRY TO THOMAS R. HILL

Question 1. Dr. Fluharty, you tell us that the North Pacific Council has closed more than 15,000-square nautical miles to bottom trawling in order to protect king crab habitat, reduce crab bycatch, and reduce gear conflicts. We have some of the same concerns in New England on Georges Bank, where-Mr. Hinman tells us that bottom trawls are used over 40,000 square kilometers of bottom habitat.

What lessons can we draw from the North Pacific to help us address fish habitat issues in New England?

Response. An important consideration to keep in mind is one of scale. While the North Pacific Council has closed more than 15,000 square nautical miles to bottom trawling, this represents only little more than three percent of their management area. The New England Council, on the other hand, has closed 7,700 square nautical miles to bottom trawling year-round on George's Bank and in the Gulf of Maine, with another 13,000 square nautical miles closed to bottom trawling during a por-

tion of the year in the Gulf of Maine. The year-round closures on George's Bank represent approximately 40% of the fishing grounds—a significantly larger proportion of the management area closed than in the North Pacific.

One significant difference between the two regions is that the New England closures were all implemented for stock recovery reasons other than habitat, while the North Pacific closures specifically were implemented to protect habitat from the impacts associated with bottom trawling. Even so, all management measures proposed in New England receive a thorough review and evaluation for any potential adverse impacts to essential fish habitat (EFH) that may be associated with the proposed measure.

Thus, any proposed action which could adversely impact EFH contained within the current closed areas (the entirety of these areas has been designated as EFH for one or more species) is reviewed and the habitat-related implications are considered. For example, this past spring the Council evaluated proposals to allow a program of limited access to a closed area for scallop fishing. The final access program restricted scallop fishing to a portion of the closed area where the potential adverse impacts to EFH from scallop fishing would be minimized.

While the New England Council still has much to do to better understand and address the impacts of fishing activities on fish habitat, we are moving along a similar path as the North Pacific Council.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MAX CLELAND TO WILLIAM M. DALEY AND PENELOPE D. DALTON

The Committee did not receive responses to the following questions.

Question 1. What is the National Marine Fisheries Service's (NMFS) stance on Congress lifting the Individual Transferable Quotas (ITQ) moratorium imposed by the 1996 amendments?

Response. None.

Question 2. How does NMFS recommend implementing the recommendations of its Fishing Information System/Vessel Registration System Report to Congress? And, in the absence of additional funds, how would NMFS restructure their existing data collection systems or other operations to enhance data collection as recommended in the report?

Response. None.

Question 3. What would NMFS think about revisiting Section 306 to further extend State authority to apply to vessels fishing in the adjacent EEZ, to all coastal states, not just the State of Alaska?

Response. None.

Question 4. On another subject, isn't NMFS over-reaching the intent of Congress as expressed in the Act by listing all species found in the EEZ?

Response. None.

Question 5. Further, doesn't this contravene Section 306 pertaining to State Jurisdiction of vessels in the EEZ for which there is no fishery management plan. or for which the Council has delegated to the State the authority to manage?

Response. None.

Question 6. Finally, there is an issue that is of particular concern to my State that I hoped you could address for me, specifically relating to shark management. My question is how NMFS can suspend 100 percent observer coverage on the drift gillnets when the regulation is in effect?

Response. None.

Question 7. Relating to this issue, should the management of Highly Migratory Species (HMS) be given back to the Councils? If not all of the HMS species, then at a minimum, sharks?

Response. None.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ERNEST F. HOLLINGS TO WILLIAM M. DALEY AND PENELOPE D. DALTON

Question 1a. For a few years now, the State of South Carolina has been working with the National Marine Fisheries Service (NMFS) on a joint enforcement program.

What benefits has this program had for enforcement in South Carolina waters? Has close cooperation with the state allowed NMFS to leverage its resources?

Response. None.

Question 1b. What would it take to expand this program to other states?
Response. None.

Question 2a. Last Friday, the (attached) lead editorial in my hometown paper the *Charleston Post and Courier* congratulated the South Carolina Department of Natural Resources for stepped up enforcement of federal recreational fishing limits. Rampant violations were found—one angler was caught with more than 4 times the legal limit for vermillion snapper. One cooler on one "head boat" contained 311 fish despite the per person limits aboard the such boats.

Attachment

[From *The Post and Courier,* Friday, July 23, 1999]

WELCOME FISHING-LIMIT PUSH

Intensified enforcement of state and federal recreational-fishing limits is good news for responsible anglers.

Those fishermen already know that any violation of those regulations on the size and number of fish could lead to costly fines—and if they don't have enough cash to post bond, even a trip to jail. That's sufficient motivation to obey the law.

But responsible anglers share a more long-range motivation for limiting their catches: Widespread compliance with these sensible restrictions enhances the prospects for a bright fishing future.

Fortunately, South Carolina is naturally blessed with numerous saltwater and freshwater fish species. Unfortunately, overfishing threatens to squander that blessing. Many of our species, their populations dwindling have become vulnerable.

And when S.C. Department of Natural Resources officers caught a single angler with 89 vermilion snapper (more than four times the limit of 20 allowed for two days of fishing) Tuesday, it was clear that he wasn't showing the proper concern for that vulnerability. Because of the greedy few who threaten to spoil the fishing fun for the rest of us, DNR is stepping up its efforts to apprehend and punish violators.

Our Lynne Langley reports that officers found evidence of rampant violations at a Mount Pleasant dock this week in coolers containing 311 fish (including red snapper, red porgy, sea bass, sharks, amberjack, dolphin finfish, triggerfish, scamp grouper and 247 vermillion snapper) caught aboard a "head boat." Such vessels take paying anglers out for up to 24 hours.

Some reportedly abandoned their coolers in order to evade the legal consequences. Other fishermen paid fines of up to $425 apiece.

Ignorance of the law is no excuse—especially on those "head boats," which regularly distribute the legal limits in written form and even announce them on board. DNR also will focus on smaller, private boats. And at a time when many anglers, worried about dwindling fish stocks, have resorted to the catch-and-release method (a self-imposed limit of zero), those who exceed legal limits can expect scant sympathy on land or sea.

DNR Communications Director Mike Willis has given fair notice: "We will be going up and down the coast. Officers can show up anywhere, any time."

All anglers should remember that warning—and remember why it's necessary.

How reliable can the recreational catch data be if such violations are regularly occurring? What can we do to get better recreational data?
Response. None.

Question 2b. Other than stepped up enforcement action and cooperative programs like the NMFS/South Carolina enforcement program, what can be done to keep "head boats" within the law?
Response. None.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ERNEST F. HOLLINGS TO MAGGIE RAYMOND, THOMAS R. HILL, RICHARD B. LAUBER, AND DAVID FLUHARTY

Question 1a. Due to the Magnuson-Stevens Act's requirement that Council members be knowledgeable or experienced regarding the fisheries within the Council's geographic area of responsibility, Council members may have a personal or financial interest in a fishery that they are managing. Over the years, the Magnuson-Stevens Act has been revised to require that Council members disclose any financial interests in the harvesting, processing, or marketing of fishery resources under the Council jurisdiction held by that person, any relative, or partner and recuse them-

selves from voting on Council decisions that would have a "significant and predictable effect" on any personal financial interest.

Have the conflict of interest provisions we enacted in the 1996 Sustainable Fisheries Act solved the problem or is there more work to do? Please explain.

Response. None.

Question 1b. Some have suggested not allowing individuals with current fishing interests serve on the councils. Do you support such a change? How would it affect the quality and function of the councils?

Response. None.

Question 1c. How are non-fishing interests such as environmental interests represented on the councils? Is that representation adequate?

Response. None.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN F. KERRY TO MAGGIE RAYMOND, THOMAS R. HILL, RICHARD B. LAUBER, AND DAVID FLUHARTY

Question 1a. Tom Hill has stated in his testimony that it is essential to set hard total allowable catch (TAC) limits if we are to achieve our management objectives in New England. The North Pacific Council, along with all other Councils, have set hard TACs, but the New England Council has not.

Mr. Lauber and Dr. Fluharty, why did your Council decide to set hard TACs?

Response. None.

Question 1b. How could you manage your fishery consistent with the SFA if you did not use hard TACs? What are the problems you would encounter?

Response. None.

Question 2a. Dr. Fluharty, you tell us that the North Pacific Council has closed more than 15,000 square nautical miles to bottom trawling in order to protect king crab habitat, reduce crab bycatch, and reduce gear conflicts. We have some of the same concerns in New England on George's Bank, where Mr. Hinman tells us that bottom trawls are used over 40,000 square kilometers of bottom habitat.

Is the North Pacific Council working with fishermen to develop innovative ideas for gear improvements to mitigate these habitat impacts?

Response. None.

Question 2b. What lessons can we draw from the North Pacific to help us address fish habitat issues in New England?

Response. None.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN F. KERRY TO PENELOPE D. DALTON

Question 1a. We have provided a fair amount of money to NMFS to address economic impacts and fisheries research needs in New England, specifically $5 million in emergency funding, and an addition $1.88 million for cooperative research. Further, the Senate Appropriations bill would provide $8 million for cooperative management. One of the most strongly felt needs is for observers to document bycatch levels of cod in the Gulf of Maine. In addition, we have been encouraging NMFS to work cooperatively with our fishermen in management and on research projects.

How are the available monies now being used to assist with research and build confidence with our fishing communities?

Response. None.

Question 1b. What are the obstacles to improving cooperative fisheries management and research both in New England and elsewhere?

Response. None.

Question 1c. Can you point to successful cooperative efforts in the New England region or in other areas of the country that could provide the basis for regional or national cooperative management approach?

Response. None.

Question 2a. The report recently issued by the NMFS Ecosystem Principles Advisory Panel advocates amending fishery management plans to incorporate ecosystem approaches in accordance with a Fisheries Ecosystem Plan.

Do NMFS and the Councils have sufficient funds to undertake such a project? NMFS has estimated that a fishery-dependent data collection system *alone* would cost approximately $50 million.

Response. None.

Question 2b. How much of this work is already being in your SFA implementation efforts?

Response. None.

Question 2c. Do you foresee the need for legislative changes to implement this recommendation?

Response. None.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. OLYMPIA J. SNOWE TO PANEL I (ADMINISTRATION WITNESSES)

Question 1. Maximum Sustainable Yield (MSY) is considered by many fisheries experts to be an outdated and possibly inappropriate concept for fisheries management. Determining accurate estimations of MSY requires fishing at a range of effort, including well beyond the point of MSY, and adopting or relaxing various management measures may change the resulting MSY. Further, MSY changes over time due to environmental and other conditions.

Does NOAA believe that a broader definition of overfishing is needed to allow other methods of assessing overfishing based on the nature of specific fisheries and the currently available data on them? If so, how do you recommend changing the current definition of overfishing within the Magnuson-Stevens Act?

Response. None.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. OLYMPIA J. SNOWE TO PANEL II

Question 1. Mr. Swingle, you pointed out in your written testimony that while the work of the councils has increased dramatically due to the requirements of the Sustainable Fisheries Act, the budget request for the councils has increased a mere 2.3%.

Do the councils have adequate financial resources to carry out their work? If not, what is being left undone due to financial constraints?

Response. None. What would you recommend as an appropriate level of council funding, compared to current funding?

Response. None.

Question 2. Mr. Hinman, you have pointed out that "no council established a required standardized bycatch reporting system" since the passage of the Sustainable Fisheries Act.

What would the establishment of such a system entail in terms of data collection, technical operations, and funding?

Response. None.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. OLYMPIA J. SNOWE TO PENELOPE D. DALTON

Question 1. In your testimony, you stated that two distinct review processes exist for fishery management plans and plan amendments and the publication of agency regulations. You further state that this creates a disconnect for public opportunities to comment. Please explain in detail the resulting effect and how it should be addressed in the reauthorization language.

Response. None.

Question 2a. The Sustainable Fisheries Act requires each highly migratory species advisory panel to be balanced in its representation of commercial, recreational, and other interests. The Billfish Advisory Panel, however, has approximately 11 representatives from the recreational sector and only one from the commercial sector.

Please explain in detail the extent to which the Billfish Advisory Panel considers issues related to commercial fishing, such as pelagic longlining.

Response. None.

Question 2b. Please explain the agency's definition of "balance" as it was used in the selection of members to serve on the Billfish Advisory Panel.

Response. None.

Question 2c. There are two advisory panels to cover HMS issues. The HMS panel covers highly migratory species, such as bluefin tuna and swordfish. The only other advisory panel is the Billfish panel. Why was the Billfish AP established separately and what effect has it had on the development of other HMS policies?

Response. None.

Question 3a. The Regulatory Flexibility Act mandates that agencies, such as NMFS, consider the potential impact of their regulations on small businesses. The Office of Advocacy in the Small Business Administration has notified NMFS that there has been a consistent failure to acknowledge a "significant economic impact" when the agency makes proposals.

During the hearing, you stated that NMFS has devoted additional resources to address compliance with the Regulatory Flexibility Act (RFA). Please explain in detail what resources NMFS has used to date, including the number of employees and the specific area of expertise for each employee dedicated to compliance with the RFA.

Response. None.

Question 3b. You further stated that NMFS has requested $1 million in the FY 2000 budget to improve economic data collection. Please explain in detail how this funding will be utilized for on-the-ground data collection projects.

Response. None.

Question 3c. What further resources will be necessary in order to fully incorporate economic analysis into agency decisions?

Response. None.

Question 3d. Please explain in detail how NMFS can improve its regulatory process so that small fishing businesses receive adequate consideration under National Standard 8 and the Regulatory Flexibility Act.

Response. None.

Question 3e. In the 1996 amendments of the Regulatory Flexibility Act, OSHA and EPA were required to convene small business advocacy review panels for each rulemaking that will have a significant economic impact on a number of small businesses. To date, this panel process has resulted in higher compliance with economic information requirements of the Regulatory Flexibility Act. How would a similar panel process assist NMFS in its consideration of economic impact analyses in fisheries decision-making?

Response. None.

Question 3f. In implementing National Standard 8, does NMFS take into account the cumulative social and economic impacts of previous fishery regulations when it proposes to create additional measures? Please explain.

Response. None.

Question 4a. Observers on vessels have provided an effective way to manage the bycatch of both untargeted fish and marine mammals.

Please explain in detail which fisheries successfully utilize observers and what bycatch is reduced through observer coverage. Please provide a list of fisheries that do not currently have adequate observer coverage but could benefit by such a program.

Response. None.

Question 4b. Since adequate observer coverage does not exist in several New England fisheries, such as scallops and groundfish, what other measures is NMFS employing to help minimize bycatch?

Response. None.

Question 4c. Maine fishermen have expressed their serious concerns about marine mammal interactions and groundfish bycatch in the New England herring fishery. The fishery management plan for herring includes a provision for the use of observers. Please explain in detail why NMFS has not implemented an observer program for this fishery and provide a schedule for expected implementation of observers in this fishery.

Response. None.

Question 5a. The Magnuson-Stevens Act provides 10 National Standards that are supposed to be followed by the councils when making management proposals. Proposals are submitted to NMFS for review to ensure that they adhere to the statutory mandate. NMFS is then supposed to send all or portions of the proposal back to the council if NMFS finds that it does not fulfill the Magnuson-Stevens mandate. It is this system of review that is supposed to ensure that the councils take the necessary actions.

Proposals from the New England Council, particularly those related to groundfish, have been noted as not adhering to the National Standards. However, the proposals have not been sent back to the Council. Please explain NMFS' procedure for deciding which proposals to send back to the councils.

Response. None.

Question 5b. Please explain in detail why the use of a running clock was judged as contrary to the National Standards and thus not allowed in the New England monkfish fishery, yet was allowed in the Northeast multispecies fishery.

Response. None.

Question 6. The fiscal year 1999 Omnibus Appropriations bill provided $5 million in disaster relief to mitigate the collapse of the New England groundfish fishery. That bill was signed in law on October 21, 1998. When will this money be dispersed by NMFS?

Response. None.

Question 7a. At the hearing, Terry Garcia, Assistant Secretary for Oceans and Atmosphere said a final rule prohibiting the use of spotter planes in the General and Harpoon Categories of the Atlantic Bluefin Tuna fishery would be implemented "sooner rather than later".

Please explain in detail what Mr. Garcia meant by "sooner rather than later" and explain when the final rule prohibiting the use of planes will be implemented.

Response. None.

Question 7b. Should fishery management decisions be based on how to defend against a lawsuit? If not, please explain in detail how the decision-making process at issue has not been based on how to defend against a lawsuit.

Response. None.

Question 7c. Since you were sued two years ago on a similar rule, please explain why the agency has been unable to prepare a legally defensible rule to date?

Response. None.

Question 8. The Sustainable Fisheries Act authorizes the Secretary or Councils to establish rebuilding schedules longer than 10 years if the fish is managed under an international agreement. Please explain in detail how NMFS interprets this provision with regard to the 20-year rebuilding plan for bluefin tuna, adopted by ICCAT last year and with regard to a rebuilding plan for swordfish, which will be a major topic at the 1999 ICCAT meeting.

Response. None.

Question 9a. The U.S. Commissioners to ICCAT represent the United States and negotiate the U.S. position at ICCAT. NMFS is responsible for the domestic implementation of the agreements negotiated by the Commissioners. These agreements are a critical element of NMFS management of highly migratory species.

At what step in the regulatory process are the views and intent of the U.S. Commissioners taken into account when developing the domestic implementing regulations for highly migratory species pursuant to the international agreements?

Response. None.

Question 9b. Would NMFS support a formal consultation process with the U.S. Commissioners during the development of the domestic implementing regulation?

Response. None.

Question 10a. In 1990, Congress amended the Magnuson-Stevens Act to place highly migratory species under the direct management of the Secretary. Some have suggested, however, that authority over such fish be moved back to the regional council level.

Do you support such a move or can the current Secretarial process be improved sufficiently to be effective?

Response. None.

Question 10b. What suggestions do you have to improve the management of highly migratory species?

Response. None.

Question 11a. Implementation of the essential fish habitat provisions of the Sustainable Fisheries Act has raised a number of concerns. Some are concerned about the scope, complexity and cost. Others believe that NMFS has not been aggressive enough. Despite receiving many critical comments on the interim rule, NMFS has not moved forward with a final rule.

When do you expect to publish a final rule?

Response. None.

Question 11b. Please describe any proposed changes to the interim final rule?

Response. None.

Question 12a. NMFS has also been working to identify "habitat areas of particular concern".

Please explain in detail how "habitat areas of particular concern" are different than currently defined areas of essential fish habitat.
Response. None.

Question 12b. Under what authority has NMFS developed this new designation?
Response. None.

Question 12c. What type of regulatory measures does NMFS plan to implement in these areas of particular concern?
Response. None.

Question 13a. The National Academy of Science has recommended that Congressional action allow flexibility to the Councils in designing individual fishing quota programs.
Should Congress establish criteria for Councils to use in developing IFQ programs?
Response. None.

Question 13b. If so, do you have any recommendations for the criteria?
Response. None.

Question 14a. Some question whether it is appropriate to continue to use Maximum Sustainable Yield as the target for fisheries management.
Please explain whether you think that there are any modifications to the management process which would make MSY a reasonable goal.
Response. None.

Question 14b. Please outline alternatives to MSY as a target for management.
Response. None.

Question 14c. How do you view ecosystem management as it relates to the management of species at maximum sustainable yield?
Response. None.

Question 15. The fishery management plan for highly migratory species requires Atlantic pelagic longline vessels to pay for and carry Vessel Monitoring System (VMS) equipment. Please explain how this requirement meets National Standard 8 and it differs from the use of VMS on Pacific pelagic longline vessels.
Response. None.

PREPARED STATEMENT OF THE NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

INTRODUCTION

The Sustainable Fisheries Act of 1996 (SFA) added many new requirements to the Magnuson-Stevens Fishery Conservation and Management Act. Some apply across the board to all regional fishery management councils. Some apply specifically to the North Pacific Fishery Management Council (the Council). The following report summarizes actions the North Pacific Council has taken to meet the new requirements. The lead for responding to each of the requirements may be the Council or the National Marine Fisheries Service (NMFS). On most issues, there is shared responsibility for getting the job done by the required deadline. In order to compare each section below to the specific provisions in the SFA, we have included page references which are to the red copy of the Magnuson-Stevens Act, NOAA Technical Memorandum NMFS–F/SPO–23, dated December 1996. In summary, the Council and NMFS have responded to each of the required provisions of the SFA—most actions are complete, while a few others are in the iterative stages of development and implementation. During 1997 and 1998 the Council (and staff) spent a major portion of its time developing amendments to its fishery management plans to respond to these mandates. These amendments have strengthened the fishery management process in the North Pacific and helped to ensure the long-term viability of the fisheries off Alaska.

SECTION 3: DEFINITIONS (PP. 4–11)

SFA added twelve new definitions (e.g. bycatch, economic discards, essential fish habitat, fishing communities, individual fishing quotas, overfishing, regulatory discards, etc.) and revised several others, most notably optimum yield (OY), which now cannot exceed maximum sustainable yield (MSY). NMFS reviewed the Council's fishery management plans (FMPs) and regulations and found that, except for "individual fishing quota", none of the definitions was contained in the FMPs or regulations. Therefore, NMFS notified the Council by letter on February 20, 1997, that no revisions were needed. It was noted that OY is defined in the groundfish plans

as a numerical range, which is still consistent with the new definition in the SFA. Although the definition of OY strictly speaking may not need revision, the Council needs to review each OY and ensure it does not exceed MSY. Progress on this review and revision is further explained below in reference to Section 303(a)(3)—OY and MSY specification.

SECTION 302(E, I, J): SOPP UPDATE TO REFLECT NEW PROCEDURES (PP. 51–56)

The SFA revised several Council procedures relating to the transaction of business, procedural matters, and disclosure of financial interest and recusal. The Council approved revisions to its Standard Operating Practices and Procedures on February 7, 1997. The revised SOPP was submitted to NMFS on February 12, 1997, and subsequently withdrawn on advice that NMFS is withdrawing the Council Administrative Handbook. Revised SOPPs are nevertheless in preparation and expected to be filed and published by end of 1999.

SECTION 303(A): NEW REQUIRED PROVISIONS OF FMPs (PP. 58–60)

There are new fishery management plan requirements that relate principally to the following five areas: (1) essential fish habitat; (2) overfishing and stock rebuilding; (3) bycatch reporting and minimization, (4) recreational and charter sector descriptions and allocations, and (5) fishery impact statements as they relate to impacts on fishing communities. Additionally, Section 303(a)(3) on the specification of MSY and OY, though unchanged, needs to be considered to ensure that OY does not exceed MSY. Conforming plan amendments were to be submitted by October 11, 1998 (see PL 104–297, sec. 108(b), M–S Act Section 303 note at top of p. 64).

Status: See individual amendments below.

SECTION 303(A)(3) OY AND MSY SPECIFICATION (P. 58)

The SFA did not amend this section directly, but because the definition of OY was revised to not exceed MSY (Section 3(28), p. 9), each FMP OY needs to be examined and revised if necessary to conform with this new definition. The Council has processed changes to OY as amendment 7 to the BSAI crab FMP, and amendments 6 to the salmon and scallop FMPs. These three FMPs defer management to the State of Alaska. These plan revisions were approved in June 1998 and are now in place; the proposed rule for the salmon plan revisions are being prepared for Secretarial review.

Regarding the groundfish fisheries, the Council has submitted and the Secretary has approved amendments 56 to the GOA and BSAI groundfish FMPs. They redefined overfishing and acceptable biological catch, but did not revise MSY and OY, which are numerical ranges in each plan. Trailing revisions of OY and MSY, as they relate to the overfishing definitions and minimum stock size threshold, may be considered in the future.

Status: Council actions complete on groundfish, crab, salmon, and scallops; all revisions except for salmon overfishing have been approved by Secretary.

SECTION 303(A)(7): ESSENTIAL FISH HABITAT (P. 59)

Councils are required to describe and identify essential fish habitat (EFH) based on the NMFS guidelines established under Section 305(b)(1)(A), and to minimize to the extent practicable adverse effects on such habitat caused by fishing. NMFS published EFH guidelines as an Interim Final Rule on December 19, 1997. The Council has moved ahead with processing amendments to its five fishery management plans, Gulf of Alaska (GOA) groundfish, Bering Sea and Aleutian Island (BSAI) groundfish, BSAI king and Tanner crab, scallops, and salmon. The latter three plans defer management to the State of Alaska. The Council also is describing EFH for various non-plan species such as herring, halibut, forage fish, and GOA crab. The final Council decision on identifying and describing EFH was made in June 1998, and the EFH amendments have been approved by NMFS.

A second new EFH requirement is to minimize to the extent practicable adverse effects on EFH caused by fishing. The Council already has enacted many measures such as closed areas to certain gears, mainly directed at controlling bycatch of crab, halibut, herring and salmon in the groundfish fisheries. To varying degrees, they also reduce the impact of fishing on EFH. The Council has implemented one additional mitigation measure, closure of the Cape Edgecumbe pinnacles off Sitka, an area critical to ling cod and rockfish recruitment. Other mitigation measures may be proposed and developed during the annual call for groundfish proposals this summer, where the Council has requested proposals to identify habitat areas of particular concern (HAPC).

Status: Council action complete on EFH amendments and approved by Secretary. Council will consider future proposals for habitat areas of particular concern, and will further consider impacts of fishing activities on EFH.

SECTION 303(A)(10): OVERFISHING (P. 59)

This provision requires addition of overfishing criteria, measures to prevent overfishing, and if necessary, measures to rebuild stocks identified as approaching overfished or are overfished. NMFS initially reported on overfished stocks to Congress on September 30, 1997. No North Pacific Council stocks were identified as overfished, although Tanner (bairdi) crab stocks have subsequently been classified as overfished under the new definitions. An aggressive rebuilding plan for bairdi crab has been developed and is scheduled for approval by the Council this fall. The Council has taken final action on new definitions of overfishing for each of its five fishery management plans: salmon, scallop, BSAI crab, BSAI groundfish, and GOA groundfish to conform to the National Standard guidelines published in the Federal Register on May 1, 1998. The plan amendments have been submitted to NMFS well ahead of the October 11, 1998 deadline.

Status: Council action complete—awaiting Secretarial approval for salmon overfishing definitions.

SECTION 303(A)(11): BYCATCH REPORTING AND MINIMIZATION (P. 60)

The Council has implemented many measures to restrain and reduce bycatch and bycatch mortality of non-groundfish species in the groundfish fisheries over the past twenty-three years. However, to further comply with the new mandate in this section the Council, in summer 1997, put out a special call for proposals to reduce bycatch. Responses were reviewed by the Council in September 1997, and the following proposals (with proposer identified) were chosen for further development:

1. Ban on-bottom trawling for pollock in the BSAI (Alaska Marine Conservation Council);
2. Lower chinook bycatch limit in trawl fisheries from 48,000 to 36,000 salmon, and implement other measures to reduce chinook bycatch (Yukon River Drainage Fisheries Association);
3. Create an individual vessel checklist program, similar to harvest priority, and provide for a reward fishery (Alaska Marine Conservation Council);
4. Create a halibut mortality avoidance program (Groundfish Forum); and
5. Reevaluate halibut discard mortality and implement quick release mechanisms such as grid sorting (United Catcher Boats)

Plan amendments for proposals 1 and 2 were approved by the Council in 1998. Details of the remaining three proposals are being developed further by a special committee, with number 4 being developed further under an experimental fishing permit by industry participants. The Council believes the above actions, combined with existing bycatch management measures, satisfy the new requirements of the SFA, though it will consider fully any new proposals that may help to better address the bycatch issue.

Concerning bycatch reporting, NMFS and the Council believe that observer reports, as applied through the blend catch accounting system, provide sufficiently accurate information on bycatch in the groundfish fisheries to conform with the new requirements of the SFA. Only for chinook salmon bycatch in BSAI pollock fisheries does there remain concern over accuracy of the data. To address those concerns, the Council in April 1998 added options to the analysis of chinook bycatch reductions that could increase observer coverage to 100 percent on vessels over 60 ft. in length when fishing in an area known for high bycatch, and provide for vessel monitoring systems on vessels fishing for pollock. The Council has also requested NMFS to report further on the accuracy of basket sampling for salmon and other measures to ensure accurate enumeration of catch.

The scallop, BSAI crab, and salmon plans defer management to the State of Alaska. The scallop fisheries are monitored with observers. The main bycatch of concern in the scallop fishery is crab, and the scallop plan contains provisions to close fisheries when crab bycatch caps are reached. Crab bycatch is closely monitored by the State of Alaska to determine mortality, size frequency, shell-age, and injuries. Additionally, halibut bycatch and discarded scallop bycatch are monitored closely through the at-sea observer program. Bycatch information is being added to the scallop fishery management plan along with the definitions of overfishing, MSY and OY, as part of amendment 6 which was approved by the Council in 1998. Additional bycatch mitigation measures are not being contemplated for the scallop fishery.

The crab FMP designates bycatch measures as category 3 measures which are deferred to the State of Alaska. The State has an extensive observer program for crab

and has adopted seasons, escape rings, biodegradable panels, mesh size, and maximum entrance size requirements to reduce bycatch and associated mortality of nontarget crab in the directed crab pot fisheries. These measures complement Council efforts to reduce crab bycatch in other fisheries, and are consistent with National Standard 9, which states that conservation and management measures shall, to the extent practicable, minimize bycatch and to the extent bycatch cannot be avoided, minimize the mortality of such bycatch. Bycatch information on the crab fisheries is summarized in the crab FMP. Additional bycatch mitigation measures are not being contemplated by the Council for the BSAI crab FMP.

The salmon FMP covers a multitude of salmon fisheries managed directly by the Alaska Department of Fish and Game or through the Pacific Salmon Commission. Management decisions take into account the mixed stock nature of the fisheries which often is the basis for heated allocational disputes. Aside from recognizing the mixed stock nature of the fisheries, the Council is not contemplating any additional measures concerning bycatch or bycatch mitigation in the salmon fisheries beyond the chinook bycatch cap reduction described above. The Council is working on measures to control bycatch of salmon in the Bering Sea and Aleutian Islands groundfish fisheries as noted above, but not on bycatch measures for the directed salmon fisheries.

Status: Council action complete to date, but will continue to consider bycatch reduction and mortality measures including individual vessel incentives.

SECTION 303(A)(5.12–14): RECREATIONAL AND CHARTER FISHERIES DESCRIPTIONS AND ALLOCATIONS (PP. 59–60)

The only significant recreational fishery under direct Council management is for halibut. That fishery has no fishery management plan. It is managed biologically by the International Pacific Halibut Commission, and the Council has authority over allocative and limited entry issues. Even though there is no formal fishery management plan, many of the types of data required by the SFA were presented in the analysis performed on the halibut charterboat industry, completed in 1997. Further action to establish a guideline harvest level (GHL) for the guided sport halibut fishery is scheduled for early next year. Future analyses on recreational halibut issues will include to the extent available the types of information identified in Section 303(a)(5, 12–14).

Status.—Future analyses will incorporate this information as necessary and appropriate.

SECTION 303(A)(9)(A): INCLUDE FISHING COMMUNITIES IN FISHERY IMPACT STATEMENTS (P. 59)

The Council already incorporates information on affected fishing communities in its fishery management plan amendment analyses as appropriate, and will continue to do so, particularly when fishery allocations are considered. Examples of recent efforts in this regard include comprehensive community profiles for 126 coastal communities in Alaska and the Pacific Northwest, and a Social Impact Assessment associated with recent major actions including inshore/offshore pollock allocations and license limitation programs.

Status: Future analyses will incorporate this information as available. The Council, through its Social and Economic Data Committee and NMFS, is also developing a more programmatic data collection program for baseline community impact information.

SECTION 303(D)(4): NORTH PACIFIC LOAN PROGRAM (PP. 63, 67, AND 120)

Development of a North Pacific Loan Program is guided by three new provisions added by the SFA. Uncodified section 108(g) on p. 120 compels the North Pacific Council to recommend, by October 1, 1997, a loan program to guarantee obligations for sablefish and halibut IFQ purchases by entry level and small boat fishermen. The guarantees shall be based on a fee program developed in accordance with Section 304(d) on p. 67, and funds allocated as provided in Section 303(d)(4) on p. 63.

The Council took final action in recommending a loan program in September 1997. The process was then put on hold pending resolution of several issues, most notably the availability of funds to implement the program, and uncertainty in NMFS and NOAA GC regarding the appropriate form of the submittal package, more specifically whether an FMP amendment and/or implementing regulations would be required. Some of these issues were resolved by March 1998, and the Council wrote to NMFS on March 9, 1998, formally requesting agency action to implement the loan program. On March 26, 1998, NMFS wrote to the Council approving the loan program and stating that no further action was required by the Council

to implement the program. Under the current arrangement, the loan program will be supported by special appropriations, unrelated to any fee program, for 1998. The fee program is being developed by NMFS and is scheduled for implementation in 2000 (see Section 304(d)(2) below). To base the loan program on the fee program, when implemented, may require additional action by the Council to amend its FMPs for groundfish and regulations for halibut (which has no FMP). NMFS and NOAA GC need to provide guidance to the Council on further actions.

Status: Council action complete. NMFS has implemented loan program based on appropriated funding. Further loans will depend on additional funding through the fee plan being developed by NMFS.

SECTION 304(D)(2): FEES ON IFQ/CDQ PROGRAMS (P. 67)

This section directs NMFS to establish fees up to 3 percent on IFQs and community development quotas (CDQs). NMFS is preparing the fee program as a secretarial amendment to the groundfish FMPs. A discussion paper was provided by NMFS to the Council at the April 1998 Council meeting. The Council established a committee to work with NMFS on further development of the fee program and reviewed an implementation plan for the fee program in late 1998. Implementation is expected in year 2000.

Status: Council action has been completed using a committee to advise NMFS on program structure and implementation. Fee program now awaiting implementation by NMFS.

SECTION 305(I): COMMUNITY DEVELOPMENT PROGRAM (PP. 78–80)

This section requires the Council to establish CDQ programs for groundfish and crab in the Bering Sea and Aleutian Islands. The Council already had approved a multispecies CDQ program in June 1995 along with provisions for a groundfish and crab license limitation program. The amendment package was submitted for Secretarial review on June 3, 1997 as amendment 39 to the BSAI groundfish plan, amendment 41 to the GOA groundfish plan, and amendment 5 to the BSAI crab plan. The amendments were formally approved by NMFS on September 12, 1997 and are now in effect.

Related to this section is the existing pollock CDQ program in the BSAI. It was due to expire at the end of 1998. In June 1998, the Council took final action on continuing the pollock CDQ program and melding it with the multispecies CDQ program. It has now been implemented, with revised percentages as mandated by the American Fisheries Act.

Status: Council action complete.

SECTION 313(F, I): FOUR-YEAR REDUCTION IN ECONOMIC DISCARDS AND REPORT ON FULL RETENTION (P. 103, 105)

Section 313(f) requires the Council to submit measures to reduce economic discards for a period of not less than 4 years. The Council has complied by submitting amendments 49 to the BSAI and GOA groundfish FMPs, requiring full retention of pollock and Pacific cod in all groundfish fisheries beginning in 1998, and adding full retention of BSAI rock sole and yellowfin sole and GOA shallowwater flatfish in 2003. These amendments were approved by NMFS on September 3, 1997 for the BSAI and on October 29, 1997 for the GOA, and implemented on January 1, 1998. They will reduce economic discards of groundfish very significantly from pre-1998 levels. Discards of pollock and Pacific cod have been significantly reduced already, from 8.2 percent to 1.6 percent and from 8.6 percent to 2.2 percent respectively. Full retention requirements for selected rockfish species were recently approved by the Council as well. At this time there are no plans to develop such measures for other Council FMPs, all of which defer significant management to the State of Alaska.

Section 313(i) requires the Council to submit to the Secretary by October 1, 1998, a report on the advisability of requiring full retention and utilization. The report shall address the projected impacts of such requirements on participants in the fishery and describe any full retention and utilization requirements that have been implemented. Because the Council has already approved and implemented a full retention and utilization program for the groundfish fisheries, beginning in 1998, the emphasis of that report focused on the first-year performance of the fisheries under the new requirements and lessons learned.

Status: Council action complete.

SECTION 313(G): BYCATCH REDUCTION INCENTIVES (P. 104)

The Council may submit a system of fines in a fishery to provide incentives to reduce bycatch and bycatch rates. Though discretionary, the Council has a committee developing a vessel bycatch allowance system to place the onus for responsible fishing at the individual vessel level. This committee reported to the Council in June 1998, but has been on hold pending resolution of monitoring/legal issues with regard to accounting for individual bycatch quotas.

Status: Council action pending.

SECTION 313(H): TOTAL CATCH MEASUREMENT (P. 104)

This section requires the Council by June 1, 1997 to submit measures to ensure total catch measurement in each fishery under its jurisdiction that will ensure the accurate enumeration, at a minimum, of target species, economic discards, and regulatory discards. By January 1, 1998, the Council and Secretary are required to submit a plan to Congress to allow for weighing, including recommendations to assist such processors and processing vessels in acquiring necessary equipment, unless the Council determines that such weighing is not necessary to ensure total catch measurement.

The Council and NMFS already have a long history on efforts to provide for total catch measurement in North Pacific fisheries. For the groundfish fisheries, catch reporting is based on weekly processor reports, observer reports, and NMFS' blend system that estimates catch over the entire fishery. Fish delivered ashore are weighed, and observed, at the processing station. For the offshore catcher processor and mothership fleet, catch is measured volumetrically and transformed into catch weight using various algorithms and density coefficients. The Council and NMFS have been working together since the early 1990's to improve catch estimation and reporting, beginning with the comprehensive observer program approved by the Council in 1989 and implemented for the 1990 fisheries.

By 1992, the observer program had been up and running for two years, the Council had just finished addressing the extremely contentious issue of allocations of pollock between the inshore and offshore sectors, and the first CDQ program had been approved for pollock in the BSAI. In resolving the inshore-offshore issue, significant debate revolved around how much pollock each sector was harvesting and how much pollock and other species were being discarded. Attention focused on the ability of then current catch measurement and reporting systems to provide accurate data. Thus, in January 1992, the Council commenced a special initiative to further improve catch information, by requesting development of a regulatory amendment that would require accurate estimation and reporting of total catch by species, either by weighing or volumetric measurements, and installation of communications systems capable of daily interactive reporting of harvest and observer data. By April 1993, the amendment had been prepared, and in June 1993, the Council took final action, recommending that catcher-processors in the pollock CDQ fisheries carry two observers and provide certified receiving bins for use in volumetric estimates of the catch, or provide tamper-proof scales to weigh all fish prior to sorting and discard. NMFS implemented regulations on May 16, 1994 requiring CDQ pollock vessels to either provide certified bins for volumetric estimates of catch or scales to weigh catch.

In a separate initiative in October 1994, the Council approved a requirement for all processors in the directed pollock fishery to weigh all pollock harvest on a scale, intending that the program be implemented within two years. Various technical problems arose in finding scales that performed accurately at sea and in funding scale inspectors that would ensure accurate performance by the scales once installed. The Council was briefed periodically by NMFS in 1995 an development of scale requirements and NMFS published an advanced notice of proposed rulemaking on February 20, 1996, stating its intent to require weighing of all fish on pollock processing vessels. In April 1996, NMFS informed the Council that certified scales would be needed before the new multispecies CDQ program, passed by the Council in June 1995, could be implemented.

In February 1997, NMFS emphasized once again to the Council that certified scales would be needed before the multispecies CDQ program could commence. NMFS described the funding that would be needed to commence such a program. In response, the Council wrote to NOAA on February 13, 1997, urging funding for the certified scale program so that the new CDQ programs could commence. NMFS published a proposed rule on June 16, 1997 that responded to comments received on the February 20, 1996 advanced notice. It established the ground rules for testing and certifying scales and performance and technical requirements in an At-Sea Scales Handbook, but did not require specific processors or vessels to use certified

scales. NMFS then notified industry and the Council again that it would require certified scales in the multispecies CDQ fisheries that were scheduled to begin late in 1998. On February 4, 1998, a final rule was published establishing testing and certification procedures. Those catcher processors that intend to operate in the multispecies groundfish CDQ fisheries later in 1998 must have certified scales as well.

In direct response to the new Section 313(h) requirements, the Council in June 1997 requested a report from NMFS on the accuracy and precision of groundfish catch reporting, and from the Alaska Department of Fish and Game (ADF&G) on salmon, crab and scallops. ADF&G and NMFS reported to the Council in February 1998. ADF&G concluded that its harvest enumeration methods for all scallop, salmon, crab, and groundfish species managed under FMPs were adequate to meet the requirements of the Magnuson-Stevens Act. NMFS presented a detailed report on groundfish reporting and several recent studies of their catch estimation procedures. The Council's Scientific and Statistical Committee (SSC) received a full-day presentation in February 1998 on NMFS catch and bycatch estimation. The SSC commended NMFS for its work to improve catch estimation and to document protocols and procedures, and then encouraged further work in that direction. The SSC provided specific recommendations for further improvements, but concluded in general that ". . . existing measures for observer, reporting, and monitoring requirements provide for a reasonable system of total catch and bycatch estimation. In many respects, the system in place is better than any found around the world." The SSC stated its intent to review catch estimation each February.

The Council then proceeded to take three actions in February 1998. First, it moved to initiate an analysis for a plan amendment for catch management measures in the pollock and yellowfin sole fisheries in the BSAI with an analysis of two options: (1) a certified bin program, and (2) a scale program. In recognition of limited availability of NMFS personnel to conduct the analysis, the Council did not set a deadline, but noted that although a fully developed amendment would not be prepared in the near future, the Council would need to report to Congress on this new initiative and work underway. Second, the Council requested NMFS to prepare a matrix of current measures used in each fishery and a framework plan to improve total catch estimation over time, and report back at a future meeting as staff availability allowed. Third, the Council asked NOAA General Counsel to provide a legal opinion on whether the Council was meeting the requirements of SFA. These initiatives will be the subject of further Council discussion in 1999 and 2000.

Status: Council action complete, except for ongoing analysis of catch measurement and refinements in future years. SSC will review annually each February and provide recommendations to Council.

APPENDIX: RUSSIA REPORT (P. 120)

By September 30, 1997, the Council was required to submit to Congress a report describing the institutional structures in Russia pertaining to stock assessment, management, and enforcement for fishery harvests in the Bering Sea, and recommendations for improving coordination between the U.S. and Russia in managing and conserving Bering Sea, resources of mutual concern. The report, entitled "Russian Far East Fisheries Management," was submitted on September 30, 1997.

Status: Council action complete.

In addition to the above specific provisions, the Council and Council staff also contributed reports and information to the National Academy of Science (NAS) reports on IFQs and CDQs.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. OLYMPIA J. SNOWE TO DAVID FLUHARTY

Question 1. The National Marine Fisheries Service (NMFS) and the Councils have begun to identify a subset of essential fish habitat (EFH) called "habitat areas of particular concern." This subset targets critical areas such as places of spawning aggregations. Should these "habitat areas of particular concern" be the true focus of NMFS's work on EFH implementation?

Response. I would like to respond to this key question in several ways.

First, Essential fish habitat (EFH) under NMFS regulations to implement the SFA describes the habitats occupied by all of the life stages of fisheries managed under the MSFCMA. In relatively few cases can the NMFS and the Councils fully describe these habitats as specified by the Act. Thus, there remains an enormous amount of work to implement the Congressional mandate. Full implementation of this mandate is a prerequisite to understanding the relationships of fish and habi-

tats. With respect to the habitats of spawning aggregations of fish, this is only one component of EFH. Thus, I would argue that it is not a surrogate for the habitat areas of particular concern (HAPC).

[Parenthetically, I had a recent conversation with a key Senate staffer (Trevor McCabe) for the SFA who informed me that it was Congressional intent that HAPC would be closer to the definition of EFH than the broad brush interpretation taken by NMFS. The plain language of the SFA, however, leads me to agree with the NMFS in its drafting of implementing regulations. EFH does encompass the full life history range of managed species. HAPC is a subset of that area. It is more than a semantic debate—there are significant biological and management differences that affect management choices].

Second, my observation is that HAPCs are being developed by west coast fishery management councils to be unique areas of EFH where unique or rare aggregations of habitat exist. In some cases, these habitats are exceptionally productive or diverse. In other cases they are habitats of non-managed species, like cold water corals, biologically consolidated soft sediments, etc. that could be harmed by fisheries. Thus, it appears that a hybrid has developed through NMFS interpretation of Congressional intent. With all due respects to Congressional drafters, I would argue that the NMFS interpretation of EFH and HAPC is appropriate and should be allowed to adjust the intent of Congress that is not clearly expressed in the SFA. Biologically, the NMFS interpretation works well in the Council management context.

Third, I firmly believe that the intent of Congress and the efforts of the NMFS will converge in the implementation of HAPC. Congress should supply the financial and human resources support and the political leadership to fully implement EFH [this includes the fishing effects components of the SFA].

Fourth, and finally, the EFH and HAPC efforts by NMFS under the SFA are very much needed initiatives to lay out what is known about the relationships of fish and their habitats in a fishery management context. This work is a prerequisite for eventual management of fisheries spatially and temporally in ways that will lessen fisheries effects and promote sustainability. This work is also a prerequisite for starting to utilize the knowledge of the ecosystem that is currently available, e.g., in the proposed Fishery Ecosystem Plan recommended by the NMFS Ecosystem Principles Advisory Panel, Report to Congress on Ecosystem-Based Fishery Management www.nmfs.gov/sfa/reports.html.

Question 2. Several non-fishing interests have expressed concern that the EFH consultation requirement is duplicative of other federal consultation requirements and will result in unnecessary delays of projects. Do you have any suggestions which would address the concerns of such non-fishing interests?

Response. I would agree that the EFH consultation requirements are redundant to the comments required under the National Environmental Policy Act and the Fish and Wildlife Coordination Act. Still, used judiciously by the Councils and NMFS, the modest consultation requirements do not impose an onerous burden. The fisheries managers should be allowed, as a matter of public responsibility to request a clarification of the intent of project proposers when fish habitat interests are at stake.

As written, the consultation authority is extremely modest and lacking in teeth. An agency can go forward with an action that adversely affects fish habitat. The NMFS and the Councils are not given authority, other than moral suasion, to reject projects. The opportunity to initiate a formal dialogue could contribute to a positive outcome [achieved by voluntary means] in terms of habitat protection In terms of my analysis, the NEPA and FWCA opportunities, have statutorially stronger provisions.

Through a combination of consultations, proposers of actions that could negatively affect fish habitat are put on notice that their actions are in conflict with other federally supported and protected activities. A political balancing of interests would have to be brokered. I do not expect that the requirements would require unnecessary delays in projects. This is because the proponent of any large project substantially affecting fish habitat would be expected to be able to conform to the very reasonable review process deadlines in a timely manner. If I recall correctly, the whole process envisioned would transpire over a period of two or three months. No permit authority is provided the NMFS.

Non-fishing interests were late in recognizing that Congress was drafting this legislation (SFA). They are alarmed that it passed the Senate and the House with overwhelming majorities but they are overreacting in terms of the strength and enforceability of the provisions.

Question 3a. Some question whether it is appropriate to continue to use Maximum Sustainable Yield as the target for fisheries management.

Please explain whether you think that there are any modifications to the management process which would make MSY a reasonable goal.

Response. In short, MSY has been rejected by fishery scientists as a management goal since the mid-1970s. Still, it is an easily understood and reasonably easily quantified standard depending on the definition used. In fishery management situations where harvests allowed are above MSY there is a clear need to employ the concept. The SFA does this by requiring that all Councils and NMFS not exceed this concept.

Beyond the SFA, the use of MSY is still criticized. The fundamental critique is easy to understand. If one constantly manages for the "maximum", one is constantly pushing the limits. In fishery management, there are enormous uncertainties in recruitment, survival and fishing effects, including the effects of unreported harvests. Thus, it is precautionary to harvest at less than the MSY when one considers difficult to quantify levels of uncertainty in the fisheries management data.

The appropriate management target level for harvests is somewhat controversial in scientific circles but it certainly lies below MSY except for some species, like crab and small pelagic species, where environmental conditions and highly variable recruitment make MSY-type management irrelevant. Unfortunately and fortunately, Congress has, at least, tied the hands of Councils to not exceed MSY. Now there is a need to make for a more sophisticated directive. I offer the expert discussion of the Scientific and Statistical Committee of the NPFMC Minutes (10/14/99) as an indication of the direction that Congress must work. This is a direct empirical response to the general problem. [See below].

COMMENTS ON THE NMFS GUIDELINES

The NMFS Guidelines were set up to implement the stronger language in the Magnuson-Stevens Act regarding overfishing. The SSC has previously commented on the problems with these Guidelines and is discouraged that NMFS has not seen fit to revise these guidelines to cure the flaws previously identified and to allow consideration of alternative approaches that take advantage of modern science. [The Congressional direction tends to define stocks that are a slight amount below MSY as overfished when, if fact, this standard is traditionally quite reasonable as a target to achieve. A pound under MSY is considered overfishing, when, in fact, it is well within the range of appropriate management.] Consequently, the SSC believes that strict adherence to the NMFS Guidelines is problematic for several reasons.

A. Fish populations fluctuate widely due to a variety of reasons. One of the most important is recruitment fluctuations due to change in the environment. Setting an MSST [Minimum Stock Size Threshold] that balances conservation concerns with efficacious management is very difficulty in these circumstances.

B. Using BMSY/2 as the lower bound for the MSST is fairly arbitrary and is based on population dynamics concepts that are about 50 years old. The use of such a high value may be draconian in its effect and induce unnecessary management action in light of naturally fluctuating stocks.

C. The use of a fixed 10-year period for evaluating rebuilding is also arbitrary. It also conveys the impression that we can predict where the population will be ten years hence and ignores where the population currently is in the definition of overfished.

D. Uncertainty in stock projections is not explicitly considered and the notion of risk is ignored.

E. The requirement to set an MSST that can "recover" to a target biomass while being fished at F(ofl) is baffling. By definition, F(ofl) is defined as a fishing rate which, if continued, is likely to jeopardize a stock's long-term productivity. This is clearly inconsistent with the National Guidelines that seem to expect this same fishing rate to also promote stock recovery.

F. There is strong potential for public confusion concerning the term "overfished". Stocks with wide natural swings in abundance will be classified as "overfished" with minor or no contribution from fishing. Under this definition, there are probably hundreds of species that were "overfished" and these are species that went extinct long before humans walked the planet. No rebuilding plan, no matter how stringent, would have "rebuilt" these species. All of this is to say that the public's expectation of rebuilding must be tempered with an understanding of ecological possibilities. Since these are often largely unknown, the SSC feels it is appropriate for primary conservation emphasis to be on avoiding "overfishing."

Question 3b. Please outline alternatives to MSY as a target for management.

Response. Please take note of the above critique. Fundamentally, the issue is that strict adherence to MSY allows managers to select the highest possible rate of fishing from a statistically derived range of target levels. This inevitably leads to a de-

cline in harvests over time. Selection of the lower range of target level would remedy this problem but that tends to be unacceptable to the fishing fleet. Experience on the NPFMC indicates that conservative fishing rates tends to allow rebuilding of stocks and sustainable yields for most species. The species like crab for which recruitment fluctuates wildly in response to environmental conditions is not susceptible to this model. Many different conservative reference points could be defined less than MSY.

Question 3c. How do you view ecosystem management as it relates to the management of species at maximum sustainable yield?

Response. We are far from being able to define what is meant by ecosystem sustainable yield but it is likely to be a target that is below MSY for any single component of the ecosystem. Ecosystem components vary through time in response to environmental variability. Maintaining the complex interactions of a species within an ecosystem requires that it is not over-stressed by harvest of other measure.

Question 4. Based on experiences in the Pacific Northwest with cooperatives under the American Fisheries Act, do you believe that Congress should look at similar cooperative agreements for other fisheries? Please explain.

Response. The ability to form cooperatives has been available to U.S. fishing interests since 1934. It is a little realized alternative available to rationalize fisheries. The general intent of the Act was to allow harvesters to join into an association to process their catch independently of previous sole buyer arrangements that gave them a low price. The Pacific hake cooperative off Washington, Oregon and California and the pollock cooperatives off Alaska are based on another type of cooperative where a sector of the industry seeks a determination from the Department of Justice of whether or not its agreement is in restraint of trade. These cooperatives are dramatically reducing the amount of effort in the sector of the fishery, increasing product yields from a given quota, avoiding bycatch, improving safety and yielding higher revenues.

The American Fisheries Act (AFA) cooperatives for inshore processors and catcher vessels falls into yet another arrangement—one mandated under the AFA to include processors and harvesters in a cooperative. In theory, these are potentially able to deliver the benefits of a cooperative form by sharing the benefits of a fishery equally, but there is much skepticism about the way they are structured in the AFA over the balance of bargaining power. At the present time (1999) the cooperatives are in the process of formation for the fishing season in the year 2000. Based on recent analysis, the balance of negotiating power lies in the onshore processing sector at the expense of the harvesters. The key provisions that enforce this imbalance are the requirement that harvesters may only form cooperatives with the processor to whom they have delivered the majority of their catch in the previous year and the requirement that to change cooperative units, a harvester would have to spend one year in the open access fishery. The effect of these two requirements conspire to make leaving a cooperative extremely expensive to a harvester and thereby reducing harvester freedom of movement in a market.

Despite these flaws in the AFA style cooperative, there are potentially many models whereby quota can be allocated to sectors of a fishery acting in a cooperative arrangement. Such arrangements have the potential to achieve rationalization of the fisheries and increase in value.

Question 5. The National Academy of Sciences recently published a report titled Sharing the Fish. Please comment on it findings and recommendations.

Response. This is a tall order. Suffice it to say that the key question that Congress posed concerning whether or not the regional fishery management councils should be allowed, as appropriate, to develop Individual Transferable Quotas as fishery management measures, was answered in the affirmative. Thus, the moratorium on development of ITQ type programs should be allowed to lapse in October 2000 as specified in the legislation. Councils should have the ITQ in their tool kits to use when conditions warrant.

The NAS/NRC study committee made numerous recommendations that Congress should consider concerning "sidebars" for Councils when they apply ITQs but stopped short of actual design of a system of or guidelines for application of ITQ programs in fisheries. My abstraction of the findings would indicate that Congress has the opportunity to provide guidelines that avoid ITQ programs that allocate windfall profits to harvesters, limit the concentration of IFQ, collect rent from the IFQ holder on behalf of the public owner of the resource, etc. I am convinced by the NASINRC analysis that much more use of this approach can be beneficial in fisheries management but I am also convinced that it is not the only approach that can be applied. Other approaches like license or effort limitation, moratoria, marine

reserves, cooperatives, etc. can also be used. The fundamental issue is regional choice of the appropriate mechanism.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ERNEST F. HOLLINGS TO DAVID FLUHARTY

COUNCIL REPRESENTATION

Due to the Magnuson-Stevens Act's requirement that Council members be knowledgeable or experienced regarding the fisheries within the Council's geographic area of responsibility, Council members may have a personal or financial interest in a fishery that they are managing. Over the years, the Magnuson-Stevens Act has been revise to require that Council members disclose any financial interests in the harvesting, processing, or marketing of fishery resources under the Council jurisdiction held by that person, any relative, or partner and recuse themselves from voting on Council decisions that would have a "significant and predictable effect" on any personal financial interest.

Question 1. Have the conflict of interest provisions we enacted in the 1996 Sustainable Fisheries Act solved the problem or is there more work to do? Please explain.

Response. I am a member of the NPFMC who has no financial stake in the outcome of any fishery which I manage. This makes me an ideal at-large representative in a situation where there are many fishery interests competing for a seat at the table. As an honest broker, I am trusted to vote for good fishery management in a fair and impartial manner taking into account all of the interest I represent. While each of the interests would prefer to have the seat I occupy to be filled by someone with their interests, there is a recognition that having a neutral party is better than having a representative from an opposing interest in the seat.

That said, I do not bring as much fishery expertise to the Council process as any of the potential interests who could occupy my seat. Despite my academic credentials and analytical capacities, I am reliant on interactions with the fishing industry to develop an understanding of the detailed considerations of how fisheries regulations can work for or against practical results in fisheries management. In the nearly six years I have served as a Council member, I have come to know and respect my industry colleagues.

Frankly, I do not think that the SFA amendments regarding Council representation changed any interest conflict problems substantially. There are relatively few fisheries in the NPFMC where any individual or firm controls a 10% interest. Thus, the standard in the SFA as defined in NMFS regulations is not very restrictive. Still, I find that the Council process is one with many competing interests. Even when a Council member argues for and votes his or her personal benefit, it should be remembered that the vote is only one out of eleven (in our case) and that votes are very seldom decided on that close a margin.

Our Advisory Panel has 23 members representing nearly the full panoply of interests in the Council process. Even their votes are seldom decided on the basis of a single individual.

More important from my perspective is the obligation through the Oath of Office of Council members to uphold the national interest in the federal fisheries. In our area, not surprisingly, there is a strong bias toward regional, as opposed to national, benefit being promoted. Given the difficulty of analyzing net national benefit, the Council generally errs on the side of allocation of benefits sub-optimally. Because over 50% of the U.S. catch occurs in NPFMC waters, this can have significant implications. Even more vexing is the problem of loss of regional benefit by ill-perceived local benefits.

Therefore, I am not as concerned about individual holdings in a fishery as I am about the overall result achieved. From 1976 to the present, I have been a skeptic of a Council process dominated by individual fishing interests. Gradually, I have come to respect the enormous contribution that is made by the countervailing power of fisheries interests to reign in on other fishing interests. Overall, I have confidence that inclusion of these individual interests adds an essential dimension of empirical knowledge to the process.

It may be beneficial to include additional non-fishery interests in Council membership to bring into discussion other values than strict fishery values but there should not be a very wide divergence from the influence of those actually participating in the fisheries. Otherwise, the process could lose credibility and all manner of enforcement and compliance problems could arise.

It is somewhat odd that I, as an employee of a very large academic institution, am held to a higher standard for recusal than a fishery member of the NPFMC. I must recuse myself whenever a contract with the University of Washington is under consideration even though I am not part of a research proposal or other activity before the Council.

Question 2. Some have suggested not allowing individuals with current fishing interests to serve on the councils. Do you support such a change? How would it affect the quality and function of the councils.

Response. As noted above, I consider active participants in the fisheries as essential members of the Council and am convinced that the countervailing conflicts among fishing and processing interests lead to a certain balance in the outcomes of Council actions. Disallowing direct fisherman participation would severely constrain the use of local knowledge. It may also put decisions in the hands of people who lack respect and appreciation of the impacts of allocation decisions. In the fully occupied fisheries of today, an allocation from one sector to another is like picking pockets. There needs to be a strong biological or conservation justification for such a measure and that is extremely hard to ground-truth unless there is direct participation.

Question 3. How are non-fishing interests such as environmental interests represented on the councils. Is that representation adequate?

Response. On the NPFMC there is only one environmental representative in a formal position on the Advisory Panel and on the Council Ecosystem Committee, although there is a general desire to make sure that environmental interests are accommodated by representations when necessary. Many environmental interests are working within the process in the NPFMC through participation in all aspects of the Council process. Clearly, commercial fisheries interests are the dominant voice in council deliberations. Sport charter fishing has reached the Council agenda but it has not been accorded a Council seat [only AP seat]. On that basis, it is fair to say that environmental and sport fishing interests are underrepresented in the Council system.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN F. KERRY TO DAVID FLUHARTY

FISHING QUOTAS

Tim Hill has stated in his testimony that it is essential to set hard total allowable catch (TAC) limits if we are to achieve our management objectives in New England. The North Pacific Council, along with all other Councils, have set hard TACs, but the New England Council has not.

Question 1. Why did your Council decide to set hard TACs?

Response. The NPFMC set hard TACs from the very beginning of the implementation of the FCMA. I was not a part of the Council deliberation process but I believe it derived, in this area, from the prior efforts of the International North Pacific Fisheries Council, a multinational entity that sought to control catches on the high seas in the North Pacific. After declaration of national jurisdiction, the scientific protocol of stock assessments carried over to national jurisdiction. For much of the first decade, U.S. scientists set TACs to regulate foreign fisheries. Gradually, as foreign harvesting evolved into joint ventures and finally to a totally domestic fleets, the scientific stock assessment tradition has carried over. Based on this tradition, and the experience of fisheries managed by gear restrictions, I am convinced that the TAC approach to management is what has sustained fisheries in the NPFMC area. It presents a hard cap on effort. In the NPFMC area we have insisted on observers to account for the TAC and other bycatch. We have counted all removals of a species against that cap. Scientifically, it is a directly measurable index of what the fishery is doing. Never has the NPFMC chosen a TAC above that recommended by the Plan Teams and the Scientific and Statistical Committee.

Besides the use of a TAC by species, we cap the total harvests (removals) in the Bering Sea/Aleutian Islands at 2,000,000 metric tons—much less than the sum of the TACs based on scientifically justified allowable biological catch. By most fishery management standards, we harvest at a low rate. We have fish.

Question 2. How would you manage your fishery consistent with the SFA if you did not use hard TACs? What are the problems you would encounter?

Response. I cannot imagine how to manage the NPFMC fisheries by any other methods than a TACs. Management by effort control has many well-documented pitfalls. In my experience, the unwillingness to employ TACs is either based on an un-

willingness to restrain the fisheries to a sustainable level or the incapacity to survey and calculate an independent stock assessment. The latter is true for many developing countries. It is not the case in the United States.

The problems that we would likely encounter would be the dissipation of economic rents in excess capacity. Towing a net of a certain mesh size around and around in the ocean may produce a commercial catch but it in no way matches the catch rates when fishing on abundant fish under a TAC. A mesh restriction means that a large portion of those fish too large to pass through the net get caught. Are these larger individuals important genetically or with respect to population structure? Most likely. If TACs are not used in management, it seems that one is substituting a less effective program to restrain catches.

BOTTOM TRAWLING

Dr. Fluharty, you tell us that the North Pacific Council has closed more than 15,000 square nautical miles to bottom trawling in order to protect king crab habitat, reduce crab bycatch, and reduce gear conflicts. We have some of the same concerns in New England on George's Bank, where Mr. Hinman tells us that bottom trawls are used over 40,000 square kilometers of bottom habitat.

Question 3. Is the North Pacific Council working with fishermen to develop innovative ideas for gear improvements to mitigate these habitat impacts?

Response. The short answer is, yes, the NPFMC is working with fishermen to develop innovative ideas for gear improvements to mitigate fishing impacts. In the closed areas, the Council has placed relatively little effort on gear modifications because the elimination solves all of the problems. One effort using Geographic Information System (GIS) technology has shown that a relatively pure catch of yellowfin sole can be obtained in one area of the red king crab area. Otherwise the yellowfin sole fishery has a relatively high bycatch. Under a strict management protocol this area is opened to allow a trawl fishery.

The fishing industry has adopted and paid for a program known as Sea State to monitor daily bycatch of various species and uses the information to move fishing effort from high bycatch areas to low bycatch areas. This occurs outside of the areas closed to trawling. The industry has taken this proactive approach because the NPFMC policies would shut down the fishery based on bycatch of prohibited species before the TAC was met. With very high levels of observer coverage, it is difficult for harvesters to fish in areas closed to trawling or to discard bycatch. The combination of these efforts makes for a well-managed fishery that works.

In recent action, the NPFMC has required that all pollock fishing be done using mid-water trawls. This decreases impacts on the sea bottom immensely. The pollock fishery is one of the largest in the United States, so this is a non-trivial exercise.

The one major effect of closing large areas to trawling for purposes of crab protection is that the area of trawl fishing is concentrated. But concentrated in areas with low bycatch of crab and other species. Unfortunately, it is also concentrated in the vicinity of Steller sea lion rookeries and haulouts. The Council has been forced to close substantial areas to provide additional protections for Steller sea lions. Not surprisingly, a management measure made in one location for very good reasons may be connected to another issue of equal importance.

Question 4. What lessons can we draw from the North Pacific to help us address fish habitat issues in New England?

Response. This is a difficult question as I am unfamiliar with New England. I will hazard several observations. The first is to reduce the overall exploitation rates on the major fish stocks and that will help them to recover. To the extent that other species of fish or invertebrates are dependent on habitat that is affected by trawling, it is critical to examine the interactions using GIS. Based on those analyses, it may be possible to identify key areas for protection of habitat for crab or scallop fisheries but which are not that important for cod fishing. Such areas could be restricted from trawling. Finally, effort based approaches to fisheries management are doomed to failure. Trip limits are a prime indicator of excess capacity. Sincere efforts must be made to reduce excess capacity. That reduces impacts on habitat and feeds back into the fisheries.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. OLYMPIA J. SNOWE TO WAYNE E. SWINGLE

Question 1. The National Marine Fisheries Service (NMFS) and the Councils have begun to identify a subset of essential fish habitat (EFH) called "habitat areas of particular concern." This subset targets critical areas such as places of spawning ag-

gregations. Should these "habitat areas of particular concern" be the true focus of NMFS' work on EFH implementation? Please explain.

Response. The identification of habitat critical to certain life stages of the fish stocks and designating them as habitat areas of particular concern (HAPCs) seems to be the next logical step in protecting EFH. It would be most helpful to the management process if NMFS and the National Ocean Survey (NOS) could focus part of their research program on delineating these areas. The use of HAPCs is not a new concept. The Gulf and South Atlantic Councils established HAPCs in 1984 to protect pristine coral areas from the impacts of gear fished on the bottom, while simultaneously prohibiting harvest of stoney coral and sea fans. The coral HAPCs established off Florida and Texas total 390 square nautical miles. Through our shrimp fishery management plan (FMP) we permanently closed shrimp nursery grounds off Florida (3,652 square nautical miles) and seasonally closed nursery grounds off Texas for 45 to 60 days (5,475 square nautical miles). Subsequently we have (in 1994) prohibited all fishing in a spawning aggregation site for mutton snapper (11 square nautical miles) and (in 1999) proposed establishing two marine reserves at gag grouper spawning aggregation sites (219 square nautical miles). Identification of the importance of these areas to the life stages of the stocks we managed has required rather extensive at-sea sampling over many years. As we gain better biological information on the life histories of our fishery stocks, we recognize that there are other unique areas critical to production from these stocks. But to identify the location, scope, and importance of these areas will require additional research by NOS and NMFS.

Question 2a. NMFS has been criticized for its lack of compliance with the Regulatory Flexibility Act. Other agencies, such as the Environmental Protection Agency, are required to convene small business advocacy review panels for each rulemaking that will have a significant economic impact on small businesses.

Please explain in detail how a similar small business advocacy review panel process, such as the EPA's, could assist NMFS in bringing economic impact analysis to the forefront of fisheries decision-making?

Response. The Council already has its own advisory panel for every fishery in the Gulf that has a management plan. The membership of these panels mostly comes from the affected industry. These panels look at proposed Council actions from various angles, including impacts on their respective businesses which generally fall within the SBA's definition of small entities. At the time these panels review Council plan amendments, the reviewed documents contain an analysis of impacts, inclusive of impacts on small business entities. If this analysis finds that the Council's proposed regulatory action has a significant impact on a substantial number of small entities, an Initial Regulatory Flexibility Analysis (IRFA) is included in the reviewed documents. If the reviewed Council actions are contained in a regulatory amendment, these panels are presented with various documents, including the report of the Council's Socioeconomic Panel, to aid them in reviewing potential Council actions.

Even before the enactment of the Small Business Regulatory Enforcement Fairness Act in 1996 which made the Regulatory Flexibility Analysis judicially reviewable, the Gulf Council has already been conducting an analysis of impacts on small business entities, including an IRFA where appropriate, which the advisory panels review. In this regard, the impacts of Council actions on small business entities are reviewed on a routine basis.

If more emphasis is needed to address the regulatory impacts on small business entities, the operating procedures governing the various advisory panels may be slightly modified to stress their task of reviewing impacts on small business entities.

Question 2b. Does the Gulf of Mexico Council receive an adequate amount of socioeconomic data to consider in the development of fishery management measures. If not, please explain the impact that inadequate consideration of such factors has had on the decision-making process at the Council.

Response. The Gulf Council is generally provided with economic data which can provide an assessment of the general direction, if not the magnitude, of effects of management measures under consideration. Some measures require more refined data, such as financial information of directly affected vessels and dealers in certain areas in the Gulf or the recreational value of fish or fishing trip, that are usually not available. Most of the economic information in this regard are mainly based on input from the public through oral and/or written testimonies to the Council. In addition to these data that are not available, there is little or no information on fishing communities and their level of dependence on fisheries under Council consideration. This lack of information has at times hampered the Council in determining

which of the regulatory measures that achieve the same objective provide the least negative or most positive impacts on fishing participants.

Question 2c. Please outline any suggestions that you may have for improving socio-economic data collection measures which would maintain an appropriate level of confidentiality.

Response.

i. Conduct cost and returns studies on vessels and primary fish dealers, at least every 5 years.

ii. Include socio-economic questions in the applications for permits.

iii. Require logbooks now administered on permitted commercial vessels to include information on operating costs of vessel fishing operations.

iv. Collect more detailed dealer-level price information (e.g., by size category) on major managed species.

v. Collect more detailed information on imported fish products.

vi. Conduct Gulfwide study profiling various fishing communities around the Gulf.

Question 3a. Other regional fishery management Councils have been criticized for their inability to manage meetings in a civilized manner. This has created an environment in which people may be too uncomfortable to actively participate. As a result, some proposed management measures may not receive adequate consideration.

Has the Gulf of Mexico Council had similar experiences?

Response. During the 23 years I have served the Council I can recall only one issue where some of the persons attending public hearings and the Council session were probably reluctant to testify. This was related to an alternative proposal in 1990 by the Council to close the exclusive economic zone (EEZ) off the central Gulf coast (i.e., Florida panhandle through Louisiana) to commercial shrimp fishing in May, June, and July, concurrent with the annual closure off the Texas coast. The proposal was an alternative for reducing trawl bycatch of juvenile red snapper by area closure, instead of bycatch reduction devices (BRDs). The public hearings were attended by about 4,500 persons and the final Council session by about 500, most of whom were opposed to the idea. I am sure some proponents of the closure were reluctant to testify. The Council concluded the adverse impacts greatly outweighed any benefit from the closure.

Question 3b. Please explain how the Gulf of Mexico Council facilitates an atmosphere which enables people to speak freely during meetings.

Response. The Council provides all persons wishing to testify an equal opportunity, and normally limits such testimony to either 5 or 10 minutes per person. After each person testifies, Council members ask them questions to clarify the points they were making, or about their fishing operations. This question and answer period does two things: it assures the persons the members were listening to their testimony, and it brings out information useful to the Council in making its decision. The Council is always willing to extend its session into the evening hours to allow more testimony or to rearrange the agenda items the next day for such an extension.

Question 4. Industry representatives have criticized the Councils for not using information and recommendations submitted by Advisory Committees. Please explain how the Gulf of Mexico Council incorporates the recommendations of such committees into its decision making process.

Response. The Council utilizes two management processes; (1) plan amendments and; (2) regulatory amendments to specify the total allowable catch (TAC) for certain stocks and the management measures necessary to constrain the catch within the TAC (e.g., quotas, bag limits, size limits, seasons, etc.). In the regulatory amendment process the industry advisory committee or advisory panel (AP) is provided the stock assessment documents, the Stock Assessment Panel (SAP) report, which provides an acceptable biological catch (ABC) range and the Socioeconomic Panel (SEP) report which examines the social and economic impacts of setting TAC at various levels within the ABC range. The reports are provided to the AP at intervals of 2 to 4 weeks in advance of their meeting and are presented at these meetings by the chairmen of the SAP and SEP. Based on this information the AP develops its recommendations to the Council. The Scientific and Statistical Committee (SSC) develops its recommendations to the Council independently based on the same data.

In the plan amendment process the draft amendment is provided to the AP (and SSC) for review during the period the Council is holding public hearings, unless the amendment is controversial, in which case, the AP usually reviews the amendment twice before final Council action. At the AP (and SSC) meetings Council staff presents the plan amendment.

In both processes the recommendations of the AP are reviewed and acted upon by the management committee with oversight responsibility for that stock. The management committee recommendations are subsequently acted on by the Council. Usually some of the AP recommendations are accepted by the Council and some are not. The same is true of SSC recommendations, some of which may conflict with the AP recommendations.

Question 5a. Some question whether it is appropriate to continue to use Maximum Sustainable Yield (MSY) as the target for fisheries management.

Please explain whether you think that there are any modification to the management process which would make MSY a reasonable goal.

Response. MSY as a verbal concept is not an unreasonable goal. However, there are a number of computational problems in arriving at a reliable numerical value for MSY. For Graham-Schaefer and other stock production models that yield an estimate of MSY in biomass it is unusual that all of the conditions of the model can be met. Where there are multiple types of commercial gear used and a large recreational component in the total catch it is pure guess work on how to treat the effort for each of these components in order to have a single effort component to shape the MSY curve.

The long-term equilibrium yield from a stock will vary depending on the minimum size limit and other selectivity factors. For example the fishery for red drum, which is a major recreational fishery, has always been pursued on the first 3 to 4 year classes which occur in state estuarine waters. This results in an equilibrium yield (or MSY estimate) much lower than would be the case if the fishery were pursued on the adults in federal waters. The adults, while making a nice trophy, are not very desirable for human consumption because as they age parasite infestation increases. Surely the intent of Congress is that MSY be the lower value consistent with the historical fishery, even though that may be 2 or more times less than the MSY for harvest of adults only.

NMFS in their letter of June 14, 1999 (attachment 1) to the South Atlantic Fishery Management Council (SAFMC) which disapproved spawning potential ratio (SPR) proxies for MSY in their Sustainable Fisheries Act (SFA) Amendment, stated that "the national standard guidelines require biomass-based estimates for MSY." Actually, the national standard guideline provides for other alternatives for expressing MSY when data are insufficient for specifying MSY directly, i.e., biomass-based MSY. Recent attempts by NMFS to determine a biomass-based MSY for red snapper illustrate the problem of arriving at a reliable estimate in terms of pounds. The current stock assessment has 6 estimates of MSY ranging between 37 and 204 million pounds depending on the assumptions used in the model. This same model analyses provide 6 estimates of the biomass associated with MSY ranging from 3.5 to 4.7 billion pounds. None of these seem to be realistic MSY estimates consistent with past maximum landing levels, which suggest MSY should be on the order of 30 million pounds or likely less. Apparently the models do not take into account that the size of the standing stock and MSY for red snapper is limited by the amount of habitat with reefs since red snapper congregate on reefs. The estimates of the biomass associated with MSY (standing stock at MSY) are particularly unrealistic. This illustrates that it is probably unrealistic to use a biomass-based MSY for some stocks.

Question 5b. Please outline alternatives to MSY as a target for management.

Response. Because of the problems cited above I feel a much better standard for most of our stocks would be to use a static spawning stock biomass per recruit (SSBR) proxy for MSY. NMFS is probably correct that the use of SPR based on fecundity (egg production) is not appropriate as a proxy, in that for many stocks there is no direct relationship between eggs produced and MSY. This is because most stocks overcompensate by producing many more eggs than is necessary to produce MSY. However, since SSBR is biomass-based parameter, it not only seems appropriate to use as a proxy for MSY but also to be an allowable alternative for MSY suggested under the national standard guidelines. The computation of the SSBR is more straightforward and reliable. If it is used as a proxy for MSY, then optimum yield (OY) should also be stated in terms of SSBR, but at a higher level to be precautionary in setting the harvest target.

Question 5c. How do you view ecosystem management as it relates to the management of species at maximum sustainable yield?

Response. We currently manage some stock-complexes as an ecosystem. For example, for the grouper complex (15 stocks) we set annual commercial quotas for the shallow-water and deep-water grouper complexes. The bag limits for the recreational sector are aggregate bag limits for all grouper species. This is because usually neither the commercial or recreational sectors can fish for a single species with-

out harvesting other grouper species. Observer data for longline vessels targeting grouper indicate they commonly take about 85 species of other reef fish and sharks as bycatch. Similarly, the recreational fishermen targeting grouper catch other species. This makes it almost impossible to manage each of these interrelated stocks separately at a MSY level. What we have done for Nassau grouper and jewfish stocks, which are classified as overfished, is to prohibit any harvest or possession. This, while not completely eliminating fishing mortality, does significantly reduce it. Anecdotal information from divers indicate the jewfish stocks are recovering. Nassau grouper were overfished in the Caribbean Sea and are very rare in the Gulf.

QUESTIONS FOR PANEL III

2. Adequacy of Council Funding

Mr. Swingle, you pointed out in your written testimony that while the work of the councils has increased dramatically due to the requirements of the Sustainable Fisheries Act, the budget request for the councils has increased a mere 2.3 percent.

Question 1. Do the councils have adequate financial resources to carry out their work? If not, what is being left undone due to financial constraints?

Response. No, the Councils have not had adequate financial resources to do a good job of carrying out their work since the early to mid- 1980's. In the fiscal years 1977 through 1984 the allocations to the 8 Councils was sufficient not only to cover the administrative costs of their operations, but it also provided programatic funding which was used largely to get the information the Councils needed to carry out their management responsibility. These programatic funds made up 20 to 25 percent of the Councils' expenditures in the first several years and were gradually reduced to about 15 percent during the early 1980's, essentially ceasing to exist after 1984. The flexibility these funds provided to the Councils allowed them to do a much better job with smaller technical staffs. Our Council, for example, during the 1977–1981 period was concurrently developing 11 draft FMPs, each one requiring about 2 years for completion. Most of these were developed by contracting with academic institutions, Sea Grant programs, or private consulting firms. There was flexibility to have social impact analyses completed and even determinations of the coastal communities most dependent on commercial fishing. There was flexibility to have detailed environmental impact statements prepared and most importantly the flexibility to have analyses completed of management data sets needed for the FMPs or amendments to the FMP. In addition to the analyses and information obtained by these programatic funds, NMFS was also providing similar data and analyses, so the system was more efficient than it is now and much of the socioeconomic information was better.

The Councils, of course, like any governmental entity, live within the funding allocated to them. To give you an idea how tight the current budget is, the Mid-Atlantic Fishery Management Council needed $90,000 to cover the cost of the additional member position created by the SFA, and the other Councils could not agree to readjust their budgets to cover that cost.

What is being left undone is that amendments to address rebuilding schedules for overfished stocks and other SFA issues, such as bycatch, are proceeding at a slower pace because budget limits the number that can be done each year. But more importantly even though the Council still makes its decisions on the best available scientific information, that information base is not as good as it should be or was. This is particularly true of the information related to social impact analyses and true of the information for economic analyses. Our Council, in the past 4 years, has been able to fund only two social impact analyses of limited scope and two biological analyses. Currently NMFS has no technical capability in the social sciences that can be used to generate this information or the impact analyses. The reduction in NMFS FTE personnel has even adversely affected their capability to complete all the stock assessments we need, and flexibility is needed to contract for some of these studies.

Question 2. What would you recommend as an appropriate level of council funding, compared to current funding?

Response. Over the past 4 years, the Council chairmen and executive directors have met with NMFS headquarter staff to discuss the next federal budget under development, as it relates to both NMFS and Council needs. For the FY 2000 budget the Councils recommended to NMFS that their allocation be set at 15 million dollars. That represents a 15 percent increase over the FY 1999 allocation to the Councils. The Councils based the recommendations partially on the need to regain some programatic funding to restore their flexibility in carrying out the management responsibilities.

ATTACHMENT I

U.S. DEPARTMENT OF COMMERCE,
St. Petersburg, FL, June 14, 1999.

Mr. PETE MOFFITT, *Chairman,*
South Atlantic Fishery Management Council,
Charleston, SC

DEAR MR. MOFFITT: This letter is to emphasize the importance of addressing in a timely manner the steps that must be taken by the National Marine Fisheries Service (NMFS) and The South Atlantic Fishery Management Council to bring the fishery management plans of the South Atlantic Region into full compliance with the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). As you know, NMFS disapproved the rebuilding schedules for all grouper species, red snapper, and red drum. The disapproved schedules must be reconsidered and estimated based on the time required to recover to B_{MSY} in the absence of fishing mortality and the generation time of the species. I have asked the Southeast Fisheries Science Center (Center) to provide the Council with rebuilding schedules consistent with the national standard guidelines to replace those that were disapproved. I have also requested rebuilding schedules for wreckfish, golden tilefish, and gray triggerfish, which were classified as overfished in the 1998 NMFS report to Congress. The new rebuilding schedules will be provided to the Council before the September Council meeting. I ask the Council to take action in September to implement these new rebuilding schedules either through framework action or plan amendment.

I have also notified the Center that additional analyses to develop biomass-based overfishing definitions will be required for other stocks. NMFS partially approved the overfishing targets and thresholds that were submitted by the Council on the basis that the stock status determination criteria were incomplete and did not totally fulfill the new requirements of the Magnuson-Stevens Act. The national standard guidelines require biomass-based estimates for maximum sustainable yield (MSY), the stock biomass associated with MSY (B_{MSY}), and the minimum stock size threshold (MSST), in addition tot he fishing mortality-based spawning potential ratios (SPR) provided by the Council. These biomass-based reference points will be provided to the Council through the scheduled stock assessment and scientific review panel processes. In the interim, the Council should continue to based management decisions on the SPR reference points partially approved in the Sustainable Fisheries Act (SFA) amendment. For some stocks, such as king mackerel, Spanish mackerel, and red porgy, the biomass-based estimates have recently been provided.

In an April 19 letter, the Council requested modifications to the SFA amendment. There is no mechanism for NMFS to incorporate these modifications after submission of the final amendment by the Council. These modifications must be implemented through appropriate framework procedures or plan amendment.

I am committed to working with the council to implement rebuilding schedules and biomass-based reference points. This is a challenging task in the South Atlantic Region due to the number of managed stock and the lack of scientific information. I look forward to a close association with the Council in the future.

Sincerely yours,

WILLIAM T. HOGARTH, PHD.,
Regional Administrator.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. OLYMPIA J. SNOWE TO GLENN ROGER DELANEY

Question 1. Do you believe that NMFS sufficiently recognizes the fact that the U.S. harvests only a very small percentage of each of the Atlantic highly migratory species (HMS) and that the U.S. can not unilaterally rebuild any HMS stock? Please explain in detail.

Response. In the months immediately following the enactment of the Sustainable Fisheries Act the answer to this question was that NMFS definitely did not sufficiently recognize this fact in practice. Given that the head of NMFS was then also the U.S. Government Commissioner to ICCAT, it is unclear what the "official" position of the agency was at that time. Nevertheless, initial NMFS statements and briefings before Congress and the industry constituencies indicated that at least the Highly Migratory Species Division, General Counsel and the Office of Sustainable Fisheries intended to pursue an interpretation of section 304(e) that would subject ICCAT-managed species to completely unrealistic and unachievable, unilateral rebuilding schedules. This interpretation was in direct contradiction to my under-

standing of the Congressional intent behind section 304(e)(4)(a) which I believe recognizes that multilateral cooperation is the fundamental reality of HMS management and policy.

Fortunately, as cited in my testimony, the key fishery policy leaders and SFA authors in Congress, including Senator Snowe and Senator Breaux, provided a clear statement of Congressional intent with respect to the application of section 304(e) rebuilding schedules to HMS species. This, together with many months of meetings, discussions and correspondence resulted in the agency ultimately deferring the rebuilding scenarios for bluefin tuna and swordfish to ICCAT. It is not clear if this deferral was a *de facto* result of the timing of ICCAT action or that, indeed, the agency had been persuaded to adopt the correct interpretation of the SFA.

It appears today that NMFS policy decisions and interpretations of law are increasingly dominated by considerations of pending or anticipated litigation. Considerations of what is best for the fish and fishermen have been subverted to analyses of litigation costs and probability for success. Given the uncertainty as to NMFS future actions and interpretations of this law, I reiterate the recommendation made in my testimony that these provisions and all others in the Act that relate to HMS should be amended to clarify and strengthen the policy that highly migratory species management in the U.S. cannot be pursued by NMFS unilaterally but, instead, must be pursued through international cooperation at ICCAT. I would be pleased to have the opportunity to work with the Committee on specific measures to achieve this objective.

Question 2. During the hearing, you discussed the lack of formal consultation between NMFS and the U.S. Commissioners regarding implementation of domestic regulations based on ICCAT agreements. Please provide the Subcommittee with recommendations which would improve this situation.

Response. As a result of changes made by the Sustainable Fisheries Act, section 304(g)(1)(A) of the Magnuson-Stevens Act already requires the Secretary to "consult with and consider the views of commissioners . . . appointed under [ICCAT] in the process of preparing a fishery management plan or plan amendment with respect to any highly migratory species". Once again, I believe the Congressional intent behind this provision was to ensure that the intent of the negotiators with respect to domestic implementation of ICCAT recommendations be fully considered and reflected in NMFS regulations.

Unfortunately, section 304(g)(1)(A) has been insufficient as written to achieve an adequate level of Commissioner input into the development of plans, plan amendments or regulations that implement ICCAT recommendations. As my testimony indicates, I have never been the subject of such a consultation in five years as Commissioner nor have my views ever been formally solicited in this capacity. Furthermore, I have witnessed a number of important situations in which explicit Commissioner intent as to the domestic implementation of an ICCAT recommendation was not reflected in a resulting regulation. The consequence of ignoring explicit Commissioner intent with respect to domestic implementation of ICCAT recommendations is to seriously undermine the credibility of the Commissioners and their ability to effectively negotiate on behalf of legitimate U.S. interests.

In addition to those examples mentioned in my testimony, I would like to add the following two examples to the record in which explicit Commissioner intent was ignored in the resulting implementing regulations.

First in the context of the 1996 ICCAT recommendation regarding western Atlantic bluefin tuna, a provision was included obligating the U.S. to adopt measures designed to reduce dead discards of bluefin tuna. During the development of this measure while at the 1996 ICCAT negotiations held in San Sebastian, Spain, and before such provision was agreed to by the U.S., the U.S. Commissioners and the leadership of the NMFS agreed on a handshake that the U.S. implementation of this provision would include a relaxation of the current 1-fish landing limitation imposed on the U.S. incidental category (longline fishery) fishing in the Atlantic areas (not the Gulf of Mexico). This understanding was reaffirmed in subsequent meetings and discussions between myself, the other U.S. Commissioners and NOAA/NMFS leadership.

As was agreed, the objective of allowing multiple landings in the Atlantic area was to enable this fishery to ultilize more fish and discard less fish, while remaining within its U.S. incidental category quota. It was well recognized by those in these discussions that the arbitrary 1-fish limit was actually causing much of the U.S. bluefin tuna dead discard problem and that this was a terrible, unnecessary waste of a fishery resource. It was also recognized that this arbitrary limit was substantially preventing the incidental category from rightfully landing its U.S. category quota allocation. The Commissioners intent to relax the 1-fish limit would have met

our obligations to reduce dead discards under the specific ICCAT provision, and would have enabled the U.S. to reduce waste and bycatch, and rationalize the domestic management of the U.S. longline fishery.

Nevertheless, the resulting regulations implementing the 1996 agreement did not include any relaxation of the 1-fish limit that was causing our regulatory discards in the first place. Instead, the regulations included a closed fishing area specifically designed to reduce the incidental category's overall catch of bluefin tuna and thereby, indirectly, reduce discards above the 1-fish limit. Maintaining the 1-fish limit and imposing a closed fishing area was completely inconsistent with the Commissioner's intent and I feel I personally lost a great deal of credibility as a U.S. Commissioner with the U.S. delegation and affected constituencies as a result.

The second instance again involved a U.S. obligation to manage dead discards of bluefin tuna. In the 1998 meeting of ICCAT, the U.S. Commissioners developed, in cooperation with NMFS personnel and scientists, the rebuilding plan for western Atlantic bluefin tuna that was ultimately adopted (with modifications) by ICCAT. As part of that plan, the U.S. was allocated a dead discard allowance of 68 tons. Following extensive consultations within the U.S. delegation, the Commissioner's explicit intent was for the dead discard allowance to be distributed proportionately among each of the U.S. fishery sectors so that each sector could be individually held accountable for its discards. This was intended to provide each sector with an incentive to further reduce discards.

This proportionate sector distribution approach was very similar to that which the Commissioners recommended for the distribution of the additional 43 tons of directed U.S. quota as mentioned in my testimony and stemmed from the same discussions at the ICCAT meeting in Santiago de Compostella, Spain. Neither was followed by NMFS when they initially issued the implementing regulations (HMS FMP) and only the 43 ton directed quota distribution problem has been fixed subsequently. There has been no distribution of the dead discard allowance to each of the U.S. sectors. The Commissioner's specific intent to provide sector accountability and an incentive to reduce discards within each sector was ignored. Again, my credibility as a Commissioner has suffered as a consequence and this makes it much more difficult to negotiate ICCAT measures in the future if I cannot be sure how they will be imposed on my own fishermen.

It is clear from these experiences that a more formal and explicit process is needed to ensure that the intent of the U.S. Commissioners regarding domestic implementation of ICCAT measures is ultimately reflected in U.S. regulations. The Commissioner's credibility within the U.S. constituencies and thus, their ability to be effective negotiations on behalf of the U.S. is at stake.

My recommendation to improve this situation is basically to get the Commissioner's intent in writing and to require NMFS to follow this intent unless it is clearly inconsistent with other provisions of the Act. Thus, I would specifically recommend that the Atlantic Tunas Convention Act (ACTA) be amended to include a provision that requires the U.S. Commissioners to submit to the Secretary a joint written report by a date certain following each ICCAT meeting. Such report should include any specific recommendations and advice of the Commissioners with respect to the domestic implementation of any ICCAT recommendation that affects U.S. fishermen. Particularly important should be an explanation of how the Commissioner's intent for domestic implementation was relevant in their drafting of the recommendations and negotiations with other ICCAT Parties.

Further, section 304(g) of the Magnuson-Stevens Act should be amended to require the Secretary to review this report and follow such recommendations (unless they are inconsistent with the Act) before drafting any fishery management plan, plan amendment or regulation, to implement such ICCAT recommendation. Consideration of this report by the Secretary should include a meeting with the Commissioners to review the document. Any of the Commissioner's recommendations or advice not followed by the Secretary should be noted in writing in the Secretary's subsequent actions (e.g. proposed rule) with explanations of the reasons therefor. The analogy is somewhat to section 304(a) under which the Secretary reviews the input of the Councils and basically follows the Council's recommendations unless such recommendations are determined to be inconsistent with the national standards, other law, etc. I would be pleased to work with the Committee in drafting specific provisions to achieve this objective.

Question 3. Some question whether it is appropriate to continue to use Maximum Sustainable Yield as the target for fisheries management.

a. Please explain whether you think that there are any modifications to the management process which would make MSY a reasonable goal.

b. Please outline alternatives to MSY as a target for management.

c. How do you view ecosystem management as it relates to the management of species at maximum sustainable yield?

Response. Since I was invited to be a witness in my capacity as a U.S. Commissioner to ICCAT, I will try to limit my responses, when relevant, within the context of ICCAT and HMS species. I would also note that I addressed some aspects of these questions about MSY in my written testimony under "further issues" (1).

The management process of using the concept of MSY (MSC) at ICCAT as the goal of our management efforts is a reasonable one. It is not unreasonable to strive to achieve the greatest number of tons of fish from a resource as we can on a sustainable basis. Our job is to maximize benefits from fishery resources yet protect them from depletion. It is, perhaps, not the only reasonable goal that could be adopted, but it is what the Convention adopted many years ago.

What is not reasonable is for a management process to treat every fishery as if it were in a state of extreme biological crisis if it is not producing this absolute maximum sustainable amount of fish at any given time, and to require draconian economic and social sacrifice to achieve this absolute maximum in some completely arbitrary time frame. That is, in fact, what the Act currently does through the linkage of the flawed definitions of overfished/overfishing to the arbitrary rebuilding provisions of 304(e).

As stated in my testimony, overfished may mean "not producing MSY", but is that really the key conservation concern? Is the maximum really a valid conservation objective? Do we have to achieve the maximum in order to have an acceptably healthy resource? Is management a failure if we are not at the maximum? I think not.

I believe "overfishing" is what really matters and is what should drive management decisions regarding fishing mortality. However, that term should not be defined as it currently is in the context of some estimate of MSY based on historical data, but should be re-defined in terms of an evaluation of the current sustainability of the fishery. Management decisions should be based on determinations of whether the fishery is at equilibrium between sources of mortality balanced by growth and reproduction. Overfishing is when fishing and natural mortality exceed the level necessary to achieve this equilibrium.

Thus, I believe the valid conservation concerns or "targets" are, for the population to be:

(1) above a species-specific minimum threshold of abundance, and

(2) at equilibrium (sustainability).

Such a minimum threshold should account for the unique growth and reproductive characteristics of each species and provide a significant buffer above that level where the population is so low it collapses.

Above a minimum threshold of abundance, achieving the maximum sustainable yield, and in what time frame, are really social and economic issues. Once such conservation targets are met, then I think we can develop social and economic targets and consequent management strategies on a fishery by fishery basis regarding if and when MSY should be achieved. Or, perhaps we can focus more on maximizing or optimizing the economic yield at various sustainable biological yields above the minimum threshold. After all, considering many fishery and market issues, is MSY necessarily equal to the maximum economic yield (MEY)?

What is also unreasonable is to ignore the fundamental, inherent weaknesses in the models that produce estimates of MSY and rely on them blindly and rigidly as a "Holy Grail" of sorts. There are many, many variables that are not accounted for in estimating a theoretical MSY that can have a profound effect on the reality of a population. Among these are environmental such as climatological factors that may exhibit long term cycles and have profound effects on natural mortality, reproduction and growth.

Perhaps most important of all, are the effect that dynamic ecosystem relationships have on natural mortality, growth and reproduction of a species. We tend to develop estimates of MSY for a single species based on historical measures of population levels at times when other important species in the same ecosystem may not have been under exploitation or were at either historical highs or lows in their own right. The relative levels of abundance of predator and prey species, as well as of species that directly compete for the same prey, have a profound effect on the total biomass and, thus, MSY a population can attain at any given time. How to account for these in an adequately predictable way, however, seems well beyond our present scientific capability.

In conclusion, I believe long term management strategies based strictly on an absolute requirement to achieve admittedly weak estimates of MSY within completely arbitrary timeframes are not the basis for a successful fishery management policy. This is essentially the U.S. domestic policy now reflected in the Magnuson-Stevens

Act with respect to fisheries determined not to be producing MSY (overfished) and which are, therefore, required to be "rebuilt".

The alternative of evaluating the current or near-term sustainability (equilibrium analysis) of a fishery on a relatively frequent basis combined with a process that is flexible enough to accommodate rapid responses in managing fishing mortality (F) would be better. The timing of applicable management measures and of stock assessments for each fishery must reflect the unique biology of the species. The rebuilding plans we have developed at ICCAT for Atlantic bluefin tuna and North Atlantic swordfish are more similar to this approach than our rigid domestic approach. Such a short-term strategy can still have a long term goal, and that goal could still be to reach some percentage of an estimate of MSY, as it is in ICCAT, or it could be something else that is perhaps more responsive to social and economic interests.

STATEMENT OF ARNI THOMSON, EXECUTIVE DIRECTOR, ALASKA CRAB COALITION

The Alaska Crab Coalition ("ACC") appreciates the opportunity to provide this statement to the Subcommittee concerning implementation of the 1996 amendments (Sustainable Fisheries Act, P.L. 104–297) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801, et seq.). The importance to the ACC of those amendments is reflected by the record of formal statements provided for no fewer than six congressional hearings, the first of which was held in early 1992.

The ACC is a trade association representing the owners of 60 offshore crab catcher vessels. Most ACC members are classed as small independent businesses, and each is financially dependent upon the crab fisheries of the Bering Sea/Aleutian Islands ("BSAI"). The ACC also represents an additional 60 companies, as associate members, that provide services and equipment to the fleet.

SUMMARY

For members of the ACC, implementation of the 1996 amendments to the Magnuson-Stevens Act has been a matter of life and death, in the truest sense, as well as an issue of economic survival and recovery. As the Senate Floor debate on the 1996 amendments made clear, National Standard 10 (16 U.S.C. 1851(a)(10)) to promote safety of life at sea was conceived with the BSAI crab fisheries foremost in mind. In fact, that new National Standard had its inception in a proposal to Congress by the ACC and like-minded organizations, the Fishing Vessel Owners Association ("FVOA") and the Deep Sea Fishermen's Union ("DSFU").

Implementation of the 1996 amendments providing for improved fisheries conservation, including the control of wasteful bycatch, and for enhanced fisheries habitat protection, also has been vitally important to the ACC. National Standard 9 (16 U.S.C. 1851(a)(9)) to minimize bycatch and bycatch mortality, and the new habitat protection provisions of the 1996 amendments (16 U.S.C. 1853(a)(7)), had their origins in proposals of the ACC, FVOA, and DSFU.

In view of the fact that fishing for crab in the BSAI is the most dangerous occupation in the United States, and in light of the fragile condition of important BSAI crab resources and the economic dependence of ACC members on crab fishing, it is easily understood why the ACC has been a strong advocate of improved safety, resource conservation, and habitat protection. The severe impacts of large-scale industrial bottom trawling on crab resources and their benthic environment were major concerns to which the 1996 amendments responded. By the same token, those amendments provided impetus to efforts of the ACC directed at remedial reductions in crab quotas and at necessary closures to allow crab rebuilding in the long-term interest of the fishermen who depend upon this resource for their economic survival.

The ACC's assessment of the 1996 amendments' effectiveness in addressing the fundamental issues of safety, resource conservation, and habitat protection would be wholly positive, were it not for two, critically important factors. First, those amendments included a moratorium on new individual transferable quotas (16 U.S.C. 1853(d)(1)), thus legislatively consigning the BSAI crab fisheries to other management systems. The ACC believes that ITQs would have provided the single most effective means of promoting safety, resource conservation, and habitat protection, by reducing capacity in the greatly overcapitalized BSAI crab fleet to sustainable levels. The destructive race for crab would have been decisively brought to a close, as fishermen would have been allowed to harvest their individual quotas without the loss of life due to the combined pressures of severe weather and hard work at an intense pace for long hours. Longer soak times for pots, allowing juvenile and undersize female crab escape mechanisms to work, would reduce bycatch and bycatch mortality. In a slower-paced fishery, there would be fewer pot lifts, thus reduc-

ing bycatch mortality due to exposure of juvenile and female crabs to multiple captures, on-deck handling, and changes in water temperature. Faced with ongoing pressures to reduce pot limits as a solution for overcapitalization and without ITQs and multi-species directed crab fisheries, ACC's efforts directed towards conservation and rebuilding are severely handicapped. However, the ACC is encouraged that, in testimony before the House Subcommittee on Fisheries Conservation, Wildlife and Oceans on July 22, 1999, the Chairman of the New England Fishery Management Council, on behalf of all the chairmen of the regional councils, called for the termination of the ITQ moratorium.

Second, the 1996 amendments did not provide an effective alternative to ITQs for the reduction of excessive fishing capacity. Nearly three years after enactment of the buyback provisions of the Magnuson-Stevens Act, and despite legislation enacted last year to stimulate regulatory implementation, final regulations have not been promulgated. Consequently, a buyback remains out of reach. Testimony by NMFS in the above-referenced congressional hearing stated that the absence of final regulations, which are under review, industry may proceed with the development of "buyout plans". The industry group formed to pursue the BSAI crab license buyback has long since completed the task of developing a plan, as the NMFS well knows, having reviewed and extensively commented on that document and having received a final revision. The ACC believes that the continued delay on the needed final regulations is unfortunate, because in the absence of ITQs, a license buyback could contribute to the reduction of excess harvesting capacity in the BSAI crab fisheries.

The ACC hopes that, as Congress approaches the further reauthorization of the Magnuson-Stevens Act, there will be active consideration of what can be done to address the severe problems that continue to plague the BSAI crab fisheries due to continued overcapitalization. The ACC cannot help but envy the halibut and sablefish ITQ program established prior to imposition of the moratorium by the 1996 amendments. Moreover, the many BSAI crab fishermen and their families are extremely sensitive to the fact that the BSAI pollock fishermen and processors have greatly benefited from the subsidized buyback and the special cooperatives provided by the American Fisheries Act ("AFA"). Title II, P.L. 105–277. These measures have eliminated excess capacity and allow the establishment of *de facto* individual quotas for 110 catcher vessels and 20 catcher processors, with no fixed limits on ownership of quotas. It also established the first limited entry system for processors (restricting shorebased processing and marketing of pollock to seven entities). Dedicated crab fishermen, who are prohibited by the AFA from crossing over into the pollock fisheries, deeply resent the fact that the AFA pollock industry has used its vastly enhanced economic and political power to pressure the North Pacific Fishery Management Council ("NPFMC") and the National Marine Fisheries Service ("NMFS") for an increased and permanent presence in the already heavily overcapitalized BSAI crab fisheries. Despite clear congressional intent, as reiterated in recent Senate correspondence, implementation of AFA protections ("sideboards") for the dedicated crab fleet has been, and continues to be, problematical.

The bottom line is that BSAI crab fisheries remain subject to the anachronistic and all-too-obviously failed management system which forces fishermen to race for fish at the risk of their lives, and to the detriment of the resources, in marginal economic conditions. Due to the moratorium on ITQs and to deficiencies of the license buyback provisions of the Magnuson-Stevens Act, as well as to pressures on fisheries managers by the AFA pollock industry, losses of lives and livelihoods in the BSAI crab fisheries do, indeed, remain major challenges.

The members of the ACC, and Bering Sea crab fishing vessel owners in general, are mostly small business entities, struggling to survive in the crushing grip of not only problems of safety and resource conservation, but in the midst of consolidation and aggregation of ownership of processing facilities in the region. This dynamic of consolidation has contributed to the demise of a number of fisheries in the Alaska region. (See the Federal Investment Task Force ("FITF") Report to Congress, specifically comments pertinent to the North Pacific region, pages 182–187.) The inception of Statehood for Alaska allowed the adoption of measures for the State-regulated fisheries that limited the extent of the control of the processing industry over those fisheries, and promoted conservation of the resource, and the independent small businesses that harvest those resources. There is no corresponding feature of the federal management system for the BSAI crab fisheries. Indeed, the AFA ties harvesting vessels to BSAI pollock processors, among which are the major BSAI crab processors, through single market cooperatives. This consolidation of market power by the processors in the pollock sector spills over into the crab sector.

The FITF Report states, "Excess capacity of fishing fleets is one of the most pressing problems confronting U.S. fishery managers. Excess capacity causes economic

waste and over harvesting of resource stocks." Page 15. Because the problem of excess capacity is common to virtually all Alaskan fisheries, and because the AFA has uniquely altered the BSAI fisheries complex, the ACC urges action by Congress that is both general in application and specific to the BSAI fisheries:

- The moratorium on ITQs should be allowed to expire by its own terms.
- The Magnuson-Stevens Act should be amended—
  - to require that each fishery management council, within a statutorily provided time, analyze fisheries in its region to determine whether there is excess harvesting capacity and propose to the Secretary specific fishery management measures for the reduction of such capacity to sustainable levels;
  - to ensure that license and vessel buyback provisions are implemented in a timely and practicable manner;
  - to provide a framework for fishermen's cooperatives that are suited to the conditions of the BSAI crab fisheries; and
  - to prohibit the unfair and unreasonable participation of 42 AFA pollock vessels in the BSAI crab fisheries, and provide protection for BSAI crab fishermen from excessive market power of AFA processors.

THE BSAI CRAB FISHERIES IN CONTEXT—INDUSTRY, RESOURCES, POLICIES, LAWS, AND REGULATIONS

Well before the enactment of the 1996 amendments, it was clear that the BSAI crab fisheries could not be addressed in isolation from other fisheries of the area. In 1965, the Bristol Bay Crab Pot Sanctuary was established by agreements reached in the preceding year with Japan and Russia to prevent bottom trawling by vessels of those nations from damaging the valuable crab populations and their habitat. In 1981, early in the "Americanization" of the fisheries of our 200-mile zone, U.S. groundfish trawl vessels were exempted from the bottom trawl conservation measures, and invaded the fragile crab nursery, with far-reaching consequences for the crab resources and the nascent domestic crab fishing industry.

From the inception of the ACC in 1986, the organization engaged in efforts to control the, by then, enormous bycatch of crab in the burgeoning domestic industrial groundfish trawl fisheries and to improve conservation in the directed crab fisheries. To these ends, the ACC sought improved scientific observation and analysis of both the groundfish and crab fisheries, as well as remedial management measures. A limited trawl closure area to protect female and juvenile king and tanner crabs and regulatory caps on trawl bycatch of crab were initiated and refined, and crab fishing gear was improved. Notably, the 1990 amendments to the Magnuson-Stevens Act reflected and consolidated research, bycatch reduction, and habitat protection initiatives undertaken by the ACC.

In 1992, at the outset of the reauthorization process leading to the enactment of the 1996 amendments, the ACC called to the attention of Congress the need to build further upon the 1990 amendments, in response to the continuing impacts of trawl bycatch on the crab resources and of trawl gear on the crab nursery areas. The ACC noted that, while the groundfish trawl fisheries continued to inflict direct costs on the crab industry by reducing its present and future harvests, the crab fleet, which was legally required to utilize highly selective fixed gear, did not impose such costs on the trawlers.

The ACC pointed to the need to address the escalating problems presented by overcapitalization in the BSAI crab fleet, including the horrific losses of life in what had become the most dangerous occupation in the United States. Statements provided by the ACC for congressional hearings also called attention to the results of the 1992 United Nations Conference on Environment and Development and the 1992 Cancun International Conference on Responsible Fishing, which focused on sustainable fisheries and responsible fishing, respectively, and identified excessive fleet sizes, insufficiently selective gear, and habitat degradation as critical challenges to the world's fisheries. The ACC took note of the fact that the United States Government had assumed a leading role in those conferences.

As observed by the ACC in its testimony during the 1996 amendments process, the "fishing derbies" that resulted from too many fishermen chasing too few fish were accountable for both poor safety of life at sea and poor conservation of resources, and contributed to habitat degradation. In its 1993 testimony, the ACC urged that the full array of limited entry measures be available to remedy the conditions of the BSAI fisheries, and called for specific statutory provisions to limit and reduce excess fishing capacity.

In 1994, the halibut and sablefish fisheries, in which open access derbies had been so costly to the fleet and the resources, were transformed with the adoption of ITQs. By 1995, it became clear that this management system held real promise for the

other overcapitalized fisheries of the BSAI. The benefits of ITQs in the BSAI crab fisheries would extend not only to safety and conservation, but also to improved economic conditions. ACC testimony provided the rationale for ITQs:

• *Improved safety.* Fishermen would be in the position to slow down the pace of their fishing activities. They would be able to fish when the weather conditions would not present unacceptable hazards.

• *Improved resource conservation.* With a slower pace of fishing, selectivity in targeting resources and sorting catches would be vastly improved. Discards, and the mortality of discards, would be reduced. Individual quotas would provide an incentive to fishermen to engage in practices that would enhance stock rebuilding.

• *Improved individual accountability.* With individual quotas, fishermen would feel, and would be, more accountable for their conduct. Responsible fishing would be the rule, not the exception, as each quota holder would have a tangible share of the resource.

• *Improved economic efficiency.* Transferable ITQs would provide a market-based, industry buy-out program for the overcapitalized fisheries, with no expenditures of public funds for the retirement of excess harvesting capacity. By leading to a reduction of fleet size through consolidation of quotas, the vessels remaining in the fisheries would achieve improved operating efficiency, while at the same time, caps on quota shares held by individuals and businesses would prevent undue concentration of fishing privileges.

• *Increased value of the tax base and new source of fees.* With an economically sound fishery, profitability would improve and, thus, the revenue base would expand.

• *Reduced gear conflict.* With less gear deployed on the grounds at any given time, conflict with other gear types would be reduced.

• *Improved product quality and added value.* A slower-paced fishery would allow the more careful handling of the catch to preserve quality, to develop value-added products, to improve competitiveness against high quality imported fishery products, and to increase acceptance in quality- conscious export markets.

• *Improved markets.* Fishermen and processors would be able to coordinate the harvest and delivery of product to respond to market demand.

In the waning hours of the 1996 legislative process, when a general moratorium on future ITQs appeared inevitable, the ACC urged that an exception be made for fisheries having the very worst safety, conservation, and economic problems. The ACC implored Congress to consider the fact that, according to the United States Coast Guard, crab fishing in the BSAI claimed lives at the rate of 7 per year during the 10-year period, 1987–1996 in a fleet comprised of fewer than 2,000 fishermen. Based on the U.S. Government statistical base, this translated to an annual average of 350 out of 100,000 workers, compared to an average annual rate per 100,000 of 7 for all U.S. occupations, 71 for all U.S. fisheries, and 250 for the former halibut derbies. The ACC also pointed out that the crab resources of the BSAI were at historically low levels of abundance, which accellerates the race for fish and fishery-related fatalities. The ACC noted the annual net revenues of the average, dedicated BSAI crab fishing vessel had plummeted to approximately $6,000.

When it became apparent that, despite these safety, conservation, and economic conditions, ITQs would be proscribed for the BSAI crab fisheries, the ACC supported provisions that would authorize a buyback of crab licenses. The ACC urged, successfully, that authorization for license buybacks should not be removed from the legislation. Several latent/speculative vessels are big producers in the lucrative pollock fishery, and other vessels are dependent on cod fisheries. Restriction of buybacks to vessels would have effectively precluded the use of this management device in the BSAI crab fisheries, due to the prohibitively high cost involved.

Since enactment of the 1996 amendments, the conditions in the BSAI crab fisheries have remained poor, and have even declined. After two years of lower fatalities in these fisheries, the number has already jumped back to historical levels, with 7 deaths, including one major marine casualty, thus far this year. Due to the limitations of the management system, the 1999 opilio fishery was not conducted in a manner that could provide for safety of human life in severe weather conditions with the intense race for economic survival.

As for the resources, while there is the expectation of some movement toward recovery by the Bristol Bay red king crab, bairdi are severely depressed, and indeed, are deemed overfished under applicable provisions of the Magnuson-Stevens Act. Bristol Bay red king crab and opilio resources remain under heavy pressure, and are subject to deeper declines, as a consequence. Allowable catches, set forth below, reflect this phenomenon.

	Red King	Bairdi	Opilio
1990	20,245,815	64,200,000	160,000,000
1991	17,058,224	31,500,000	325,200,000
1992	8,034,018	35,100,000	313,000,000
1993	14,495,197	16,900,000	229,200,000
1994	no fishery	7,600,000	148,000,000
1995	no fishery	4,200,000	74,000,000
1996	8,380,000	2,000,000	65,710,000
1997	8,900,000	no fishery	117,300,000
1998	14,850,000	no fishery	243,300,000

As shown by the figures that follow, revenues to individual vessels have fallen off dramatically in the major BSAI crab fisheries over the past several years.

1990: 1,263,529; 1991: 963,576; 1992: 960,765; 1993: 1,107,497; 1994: 1,078,656; 1995: 937,469; 1996: 661,581; 1997: 553,857; 1998: 704,242.

By contrast, the conditions in the halibut and sablefish ITQ fisheries have much improved. The fisheries are safer, the resources are robust, and the fishermen have secured a business environment that provides a considerable measure of stability that now enables long term planning, in contrast to conditions of chaos and uncertainty, characteristic of today's derby fisheries in the BSAI crab fisheries. These kinds of conditions are rapidly leading to the demise of the American fisherman as a small businessman. See Statement of Robert Alverson, Manager, Fishing Vessel Owners Association, before the Senate Subcommittee on Oceans and Fisheries, July 29, 1999, which provides a detailed analysis of the benefits of the halibut/sablefish individual quota program.

In the groundfish fisheries upon which the affected trawl vessels depend, economic conditions, while somewhat difficult, have been far superior to those in the BSAI crab fisheries. Were the case otherwise, a large number of those vessels would have participated both regularly and recently in the BSAI crab fisheries. More to the point, the AFA has provided much-improved conditions for the pollock trawlers.

Even prior to the AFA, the financial situation of the groundfish trawlers was superior to that of the dedicated BSAI crabbers. Total BSAI groundfish trawl revenues in 1995 and 1996 were $373,400,000 and $332,500,000, respectively.[1] The BSAI trawl groundfish average ex vessel revenues in 1995 and 1996 were $2,062,983 for 181 vessels and $1,731,770 for 192 vessels, respectively. See Economic Status of the Groundfish Fisheries Off Alaska, 1996, Socioeconomic Task, November 21, 1997. (These are the most recent figures available to the public.)

Post-AFA trading in pollock co-op transferable quotas has produced a benchmark value of $ 10,000,000 per point of total allowable catch. Thanks to the AFA, the fleet and the processors have been revitalized by the increase in efficiency from consolidation of fishing capacity through statutorily authorized co-ops, the vastly increased financial equity of marketable fishing quotas, and a 37% increase in the allocation to the vessels serving shoreside processors made possible by a subsidized buyback.

The dramatic contrast between conditions in the halibut/sablefish longline fisheries and the pollock trawl fisheries, on the one hand, and the BSAI crab fisheries, on the other hand, can only be explained by differences in management systems that affect the levels of fishing capacity relative to allowable harvests. In short, the halibut/sablefish fisheries have ITQs, the pollock fisheries have *de facto* ITQs, but the crab industry has neither.

Within the constraints of the management tools available in the post–1996 amendments legal environment, fisheries managers have been able to address overcapitalization of the BSAI crab fisheries only incrementally, while the halibut/sablefish fisheries and the BSAI pollock fishery have been able to downsize and consolidate virtually overnight. This has been exceedingly costly to the dedicated crab fleet and to the crab resource.

By way of background, it will be recalled that, in 1976, the Secretary of Commerce established conditional fishery status for king crab, which was intended to slow the entry of new vessels into the fishery. However, due to strong opposition by shorebased pollock processors, focused on reallocating the pollock resource to their facilities and delaying limited access programs for federal fisheries off the coast of Alaska, it was not until June 29, 1995, that the NMFS approved fishery management plan amendments that first established a moratorium on entry of vessels into the BSAI fisheries. This groundfish and crab moratorium required that, in order to

[1] This decrease was not due to resource conditions, but was a consequence of the market.

participate, a vessel have recorded landings of one of the covered species between January 1, 1988 and February 9, 1992. Effective January 1, 1996, vessels were required to have a moratorium permit, and the number of vessels eligible to participate in the BSAI crab fisheries was thus limited to approximately 759. Under a license limitation program ("LLP") adopted by the NPFMC on June 17, 1995, and approved by the Secretary of Commerce on September 12, 1997, but not to be fully implemented until 2000, the authorized number declined to 365. (There are also 62 small vessels licensed to fish only in the Norton Sound king crab fishery.) An LLP amendment, adopted by the NPFMC on October 9, 1998, but remaining subject to approval by the Secretary of Commerce, and not to be effective until 2000, would reduce the number to 320.[2] AFA sideboards adopted by the NPFMC on June 13, 1999, but also subject to approval by the Secretary of Commerce, and not to be effective until January 1, 2000, would further reduce the fleet size to 275 for red king crab and 265 for opilio and bairdi.

The history of actual vessel registrations are reflected below.

	Red King	Bairdi	Opilio
1990	240	255	220
1991	302	285	250
1992	381	294	254
1993	292	283	273
1994	no fishery	183	253
1995	no fishery	196	235
1996	196	196	228
1997	258	no fishery	235
1998	275	no fishery	235

Even with the approval of the AFA sideboards, the maximum level of capacity in the crab fleet would remain excessive. As the chart immediately above shows, the actual vessel registrations have often been fewer than permitted by the various limiting regulations. Yet, clearly, resource conditions have not supported safe, sustainable, and economically viable fisheries at these levels of actual effort.

As pointed out above, the failure of the Department of Commerce to promulgate final regulations for implementation of section 312 of the Magnuson-Stevens Act has effectively precluded the establishment of any industry-funded buyback. In the absence of authorization for the establishment of ITQs, this has been a particularly serious disappointment. Even the much-advertised leadership of the United States at the very recent global conferences on fishing fleet overcapitalization has not been translated into a decisive management response to the continuing crisis in the BSAI crab fisheries.

The ACC notes the enormous expenditure of time and effort by the Capacity Reduction and Buyback (CRAB) Group, an organization of BSAI crab fishing vessel owners, to lay the groundwork for a license buyback. CRAB:

- commissioned, in June and August 1997, and submitted to the NPFMC and NMFS, detailed analyses of the requirements of section 312 and other applicable law;
- conducted industry surveys, in June and November 1997, to determine the viability of a buyback;
- commissioned, and provide to the NPFMC and to the NMFS, on September 26, 1997, an economic study of the BSAI crab fisheries and options for a license buyback;
- provided to the NMFS, on October 6, 1997, at its request, a draft of implementing regulations;
- obtained congressional action in support of implementation of section 312 of the Magnuson-Stevens Act, including a Senate letter to the Administrator of the NMFS on March 4, 1998, a Senate letter to Secretary Daley on April 21, 1998, a statutory deadline for publication of proposed regulations (section 207(g), P.L. 105–277), and the required funding authorization for a BSAI crab license buyback (section 120, P.L. 105–277);

[2] Section 202 (a)(6), P.L. 105–1277 precludes, subject to future reconsideration by the appropriate council and the Secretary of Commerce, the reentry into United States fisheries of certain vessels that had participated in therein, but been registered under foreign flag. This affected approximately [insert] vessels that had been otherwise eligible to participate in the BSAI crab fisheries. See also section 617, P.L. 105–277.

- produced and submitted to the NMFS, on September 23, 1997, a detailed buyback business plan, which was subsequently revised to reflect responses to agency comments and published, on July 13, 1998, by the NPFMC for comment by the participants in the BSAI crab fisheries;
- formally commented on the proposed regulations published by the NMFS on February 11, 1999;
- testified on several occasions before the NPFMC on developments in the pursuit of a buyback; and
- briefed the NMFS and interested Members of Congress on the industry survey results and business plan.

It is important to note that the NPFMC, by letter dated October 10, 1997, asked the NMFS to move forward with the process for establishment of a BSAI crab license buyback. In a response dated April 16, 1998, the NMFS stated, "We appreciate the Council's support of the crab initiative. We regard your letter as a statutory request for a buyback in this fishery."

The FITF Report notes that the effects of latent capacity and the shift of effort from one fishery to another are major concerns that must be addressed in the design of effective buyback programs. The report states:

> However, these and other concerns are clearly understood by those designing new buyback programs, especially the industry-funded buyback proposed for the . . . fishery for crab in the Bering Sea and Aleutian Islands. If buyback programs are to contribute to the goals set out in the Magnuson-Stevens Fishery Conservation and Management Act, they must be carefully designed by members of the specific regional fisheries." [Page 105.]

It bears emphasizing that, notwithstanding the efforts of industry, the extraordinary assistance of Congress, and the positive action of the NPFMC, the close cooperation of the NMFS Financial Services Division with the CRAB Group, and the formal response of the NMFS to the NPFMC request, the Commerce Department published, on February 11, 1999, unworkable proposed regulations for buybacks, and evidently remains at an undetermined distance from promulgating the final rules, without which the BSAI crab license buyback cannot go forward.

Further pursuit by BSAI crab fishermen of a license buyback in the absence of practicable, final regulations would be difficult to justify. Whether there remain in the industry the financial resources and the energy level to continue the pursuit of a license buyback is open to question. It is clear, however, that momentum must be regained, if a buyback is to be considered a serious option. This can only happen, if the Commerce Department demonstrates that it is, at long last, prepared to implement, without further delay and in a practicable way, the law that Congress passed almost three years ago.

ITQs remain the long-term objective of the ACC. The rationale provided the Congress during the last reauthorization process applies today. Indeed, the experience of the past three years has shown that ITQs, or their functional equivalent in the form of specially authorized cooperatives, can and do deliver solutions where other management systems have demonstrably failed. And, of course, there has been no industry-funded buyback anywhere to measure against the harsh realities of the BSAI fisheries, although the preparatory work of the CRAB Group has shown that its proposal has promise. The interest in the proposed buyback has been intensified by the initiative to request that Congress provide a statutory framework for a cooperative that would allow fishermen access to multiple markets, along the lines of the "Dooley-Hall" proposal being analyzed by the NPFMC.

The ACC respectfully requests that Congress reflect carefully upon these facts: the BSAI crab fisheries constitute the most dangerous occupational environment, and suffer from some of the most depressed renewable resources, in the United States. Even in the face of severe, immediate, and prolonged financial hardship, dedicated BSAI crab fishermen support strong conservation measures. Yet, the BSAI crab industry finds itself deprived of the highly successful fisheries management tools that Congress has made available to other fishermen of the BSAI. With each year that goes by in the absence of effective management, the cost escalates in lives, resources, and livelihoods. The ACC also respectfully asks Congress to consider the outcome of the Individual Fishing Quota Report mandated by the 1996 amendments (16 U.S.C. 1853(f)) and first released, in prepublication form, by the National Research Council on December 18, 1998. In the view of the ACC, the report demonstrates the advantages of ITQs and well justifies allowing the moratorium on them to expire, in accordance with the terms of the 1996 amendments, on October 1, 2000 (16 U.S.C. 1853(d)(1)(A)).

The problems of overcapitalization are common to many fisheries. However, the AFA has given rise to unique circumstances in the BSAI fisheries complex. Both

general and specific remedial legislative action is needed. Accordingly, the ACC urges that Congress do the following:

- Allow the moratorium on ITQs to expire in accordance with its terms;
- Amend the Magnuson-Stevens Act to—
  - Require that each fishery management council, within a statutorily provided time, analyze fisheries in its region to determine whether there is excess harvesting capacity and propose to the Secretary of Commerce specific fishery management measures for the reduction of such capacity to sustainable levels;
  - Ensure that license and vessel buyback provisions are implemented in a timely and practicable manner;
  - Prohibit the unreasonable and unfair participation of 42 AFA pollock vessels in the BSAI crab fisheries, and provide protection for BSAI crab fishermen from excessive market power of AFA processors.

Congress has the opportunity in the present reauthorization cycle to ensure that the BSAI fisheries complex as a whole will, at long last, be responsibly managed. History has demonstrated what can be expected, if Congress does respond decisively to this challenge.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. OLYMPIA J. SNOWE TO KEN HINMAN

Question 1a. Your testimony described the Marine Fish Conservation Network as a "broad-based coalition of more than 80 leading environmental groups, sport and commercial fishermen, and marine scientists."

Please describe how the Network developed its testimony, including a general description of any communications Network staff had with members of the Network.

Response. The Network's testimony was developed by its Executive Committee and Executive Director, based on the principles and positions adopted by the Network's Board of Advisors. The Board consists of two commercial fishing groups, two recreational fishing groups, six regional conservation organizations, and ten national environmental groups. We have two New England members on our Board: Conservation Law Foundation and the Cape Cod Commercial Hook Fishermen's Association. All of the Board's policy positions have been endorsed by the larger Network. Additionally, every Network member is encouraged to share their comments and opinions regarding Network positions, documents, and policy statements.

Question 1b. In the Network's preparation and production of *Missing the Boat* and the related *Briefing Book* for Congress, how did the Network reconcile any differing views among its members?

Response. The *Missing the Boat* report was developed by regional members of the Network. The Executive Committee and the Executive Director served a coordinating role in putting the regional pieces of the report together. A similar process was followed for the Briefing Book. Differing views were resolved through negotiations conducted via emails and conference calls.

Question 2a. During the hearing you were critical of the councils' progress to date with regard to essential fish habitat (EFH).

If the entire Exclusive Economic Zone of the United States were to be designated as EFH, do you believe that the most critical habitats would receive the actual protection intended for them by the Sustainable Fisheries?

Response. I do not believe that the entire Exclusive Economic Zone has been designated as EFH. As I discussed in my testimony, the Network believes that the regional councils and NMFS have identified EFH in an appropriately precautionary manner by designating fairly large areas as EFH. This approach is appropriate for several reasons. First, there are at least 844 federally managed fish species, and each with four life stages, e.g., eggs and larvae, juvenile, adult, spawning; therefore, EFH needs to be identified for at least 3,376 fish species life stages. When that large number of life stages is coupled with the large geographic ranges of many of these species, it is not surprising that large areas have been designated as EFH. Second, given the general lack of knowledge on the amount of habitat that is required to support certain stocks sizes, it is foolish to eliminate areas from protection without scientific justification. Habitat loss and degradation are often irreversible; therefore, it is critical that caution is exercised in identifying EFH. As more and better habitat information becomes available, EFH can, and should, be narrowed.

Despite assertions to the contrary, broad designations of EFH will not undermine EFH protection efforts. Rather, broad designations of EFH provide enhanced EFH protection because NMFS is better able to consider the type of habitat impacted, the degree of impact, and the area of impact when evaluating whether a federal action

will adversely impact EFH. If NMFS was limited to only evaluating, and commenting on, activities that impact critical habitats, activities that impact large areas of less critical habitat would be excluded. Overall fisheries habitat protection would be diminished under such a program.

The NMFS essential fish habitat regulations allow for the designation of rare, threatened, or ecologically important areas as habitat areas of particular concern (HAPCs). The Network supports the designation of HAPCs as a means to focus EFH protection efforts without compromising EFH protection generally.

Question 3. Several non-fishing interests have expressed concern that the EFH consultation requirement is duplicative of other federal consultative requirements and will result in unnecessary delays of projects. Does the Network have any suggestions which would address the concerns of such non-fishing interests?

Response. The Network does not believe that the EFH consultation requirement is duplicative of other federal consultation requirements, because none of those requirements directly address impacts to fisheries habitat. A specific requirement to evaluate the impacts of federal actions on fish habitat is necessary to more effectively protect such habitat. To streamline the EFH consultation requirement, NMFS is developing procedures to combine the EFH requirements with existing consultation procedures such as those required under the National Environmental Policy Act or the Clean Water Act. The Network supports these streamlining efforts, as long as they still allow for specific evaluations of EFH impacts.

Question 4. In your testimony, you stated that placing greater emphasis on economics will result in extending rebuilding periods even longer. Given the current state of some fishing communities, such as those associated with the traditional groundfish fleet in New England, please explain in detail why the socioeconomic impacts of fisheries regulations and law should receive additional emphasis.

Response. The Network believes that the socioeconomic impacts of fishing regulations and laws should not receive greater emphasis. Past emphasis on economics by the councils and NMFS has directly lead to the depleted state of many of our fish stocks. The best way to protect fishermen and fishing communities is to save the fish. Allowing short-term overfishing to occur is a risky practice which often leads to fisheries collapses. The current problems in the Gulf of Maine and the Pacific coast are directly attributable to the councils and NMFS not taking aggressive action to address overfishing and rebuild overfished stocks. Overfishing was allowed to continue until the stocks were in such bad condition that draconian actions were necessary to rebuild these stocks. If those councils and NMFS had taken the necessary steps to adequately address overfishing years ago, much of the current economic pain could have been avoided.

Question 5a. Some question whether it is appropriate to continue use of Maximum Sustainable Yield as the target of fisheries management.

Please explain whether you think that there are any modification to the management process, which would make MSY a reasonable goal.

Response. The SFA requires that all fish populations be maintained at levels capable of producing at least that population's maximum sustainable yield (MSY). The optimum yield from a fishery should be less than the MSY, according to the Act, in order to enhance long-term social, economic, and ecological benefits. Because there are many unknowns and uncertainties in fisheries data and stock assessment science and in our understanding of interspecies relationships, the Network believes the Act should be modified to incorporate the precautionary approach. This approach, established in international law and endorsed by the U.S., requires that catches be set conservatively, with adequate buffers to reduce the risk of overfishing.

Question 5b. Please outline alternatives to MSY as a target for management.

The SFA does not make MSY the target for management. Instead, it is the absolute maximum that can be removed from a stock of fish. The target is optimum yield. As stated above, prudent management requires that optimum catch levels be set more conservatively than MSY. The Network at this time is not proposing an alternative to MSY, however, like many in the fisheries and scientific communities, we are reviewing its applicability and examining alternatives.

Question 5c. How do you view ecosystem management as it relates to the management of species at maximum sustainable yield?

Ecosystems-based management requires that optimum yields for all species be justified considering ecological factors and the integrity of the ecosystem, including key predator and prey relationships. Using MSY as a management target for any single species risks adverse impacts on associated species. An adequate conservation

buffer in the setting of species-specific catch levels is necessary for the protection of marine ecosystems.

3. BYCATCH REPORTING SYSTEM

Mr. Hinman, you have pointed out that "no council established a required standardized bycatch reporting system" since the passage of the Sustainable Fisheries Act. What would the establishment of such a system entail in terms of data collection, technical operations, and funding?

Response. A standardized bycatch reporting system would have as its objective a full accounting of all sources of non-target and non-landings mortality in the fishery. Because the nature and operation of each fishery is different, each reporting system must be designed and implemented in accordance with the needs of that particular fishery. A mandatory observer program should be paid for by the fishing industry, through a fee based on the value of landings.

STATEMENT OF HON. RON PAUL, U.S. REPRESENTATIVE FROM THE STATE OF TEXAS

Ladies and Gentlemen of the Senate, distinguished Members of the Commerce Committee, I am writing today regarding the reauthorization of the Magnuson-Stevens Act.

As a Member of Congress from a Gulf Coast Congressional District I represent a significant number of individuals who engage in fishing activities in federal waters. Residents of my district undertake fishing activities for both recreational and commercial purposes. Moreover, the indirect impact that these activities have upon Gulf Coast economies can scarcely be overstated. Seafood providers, restaurants in general, the tourist lodging industry, and many others are adversely impacted when federal fishing regulation runs amuck.

Since coming back to Congress in 1997 my office has been deluged of complaints and concerns regarding the activities of the United States Coast Guard, and most especially the National Marine Fisheries Service, (NMFS) in respect to the enforcement of various provisions of the Magnuson-Stevens Act (the Act). From my observations I think it is safe to say that:

(A) the "scientific basis" of NMFS rule promulgation has come under serious and sustained criticism from both the scientific community and the fishing industry.

(B) The Gulf Fisheries Management Council has had serious disagreements with NMFS regarding interpretation of the Act.

(C) The Gulf States have had disagreements with NMFS over issues of rule promulgation and enforcement.

(D) NMFS has consistently "changed the rules in the middle of the game" making it extremely difficult for every segment of the fisheries' sector to plan their activities, thus raining havoc on the Gulf Coast economy.

(E) NMFS has certainly not won a strong positive reputation here in Washington, nor in the fishing communities. The agency's tactics are dictatorial, heavy-handed and have resulted in many complaints. The agency routinely ignores Member requests for information, summarily ignores Member wishes and has even caused its jurisdiction to be challenged, as in the instance of the Columbia River Salmon.

To the Members of the Committee, I can only suggest that there are many challenges that those of us concerned with these issues must face. Personally, I suggest a more permanent solution rests in the decentralization of these issues. In other words, the states must be granted more authority to deal with these issues. One specific suggestion I have made to the states is that they explore a multi-state compact to engage in the rearing of Red Snapper "in captivity."

It has been my observation that the problems with fisheries regulations cut across sectors, and species, and every other line of demarcation within the fisheries. My worst fears were confirmed when I received reports of a meeting that my staff attended earlier in the year. The Small Business Administration hosted a discussion of regulatory problems in the fisheries and the room was packed. In fact the phone lines were all taken up as well, as many fisheries' representatives from all across the nation attended. The representatives of the SBA were overwhelmed by the attendance, and by the frank and disturbing testimony which the representatives consistently provided. In short, it was made quite obvious that there is a serious problem with the federal government's fisheries regulations.

I will not expand upon my early comments about the wisdom of passing regulations down to the states, but I will say that as long as this Congress deems it wise to pass federal laws relative to fisheries we must be much more explicit and specific with what we pass. Further, we must do everything in our power to tilt the balance

in favor of our people, as opposed to the current system of excess delegation of our authority to administrative agencies.

To wit, I suggest the following items be included in any Magnuson-Stevens reauthorizing legislation which this body might pass:

(1) Set the recreational fishing season for red snapper as year-round in federal waters;

(2) Set the size for recreational red snapper fishermen at 15-inch minimum in federal waters;

(3) Set the maximum bag limit for recreational red snapper at four in federal waters;

(4) Expressly allow the "sale" of part of the commercial red snapper quota (TAC) to recreational fishermen; and

(5) Language making legal expenses reimbursable to any entity that successfully battles against any regulation promulgated as a result of the act.

While such items will still leave many Americans far short of the ideal situation, they will provide a small step in the right direction. This is a step which will permit us to increase the freedom of fishermen and enhance the economic stability and viability of the fishing industry and those involved in related ventures on the gulf coast and in other coastal communities across America.

Thank you for holding these important hearings and for your consideration of these ideas.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. OLYMPIA J. SNOWE TO MAGGIE RAYMOND

Question 1. The National Marine Fisheries Service (NMFS) and the Councils have begun to identify a subset of essential fish habitat (EFH) called "habitat areas of particular concern." This subset targets critical areas such as places of spawning aggregations. Should these "habitat areas of particular concern" be the true focus on NMFS' work on EFH implementation? Please explain.

Response. Our concerns regarding the designation of EFH and/or "habitat areas of particular concern" (HAPC) are caused by (1) the criteria used to define EFH and/or HAPC and (2) the measures that may or may not be developed to "protect" those areas.

The Council has been instructed (by NMFS guidelines) to use areas of high productivity as a proxy for EFH. The consequence of this advice is that all areas of productivity, and especially the areas of highest productivity, are then subject to closure to the fishery in order to "protect" EFH.

The habitat provisions of the Sustainable Fishing Act require the Councils to "mitigate the impacts of fishing gear" on EFH, despite the fact that there is very limited information regarding negative impacts of fishing gear on EFH. This has created a vehicle for the anti-fishing agenda to insist that "precautionary" measures be taken to severely restrict the use of certain fishing gears, despite a lack of evidence that those gears cause or have caused an "identifiable adverse effect on EFH." This has also created a way for users of certain gear types to call for the eradication of their competitors' gear type preference.

We believe that the SFA should be amended to define the Councils' responsibilities as the development of measures that would "mitigate the impacts of fishing gears on the productivity of areas identified as EFH or HAPC," and to "mitigate the impacts of pollution and development on the productivity of EFH or HAPC."

Question 2. Since the date of the hearing, the Secretary raised the cod trip limit from 30 lbs. to 100 lbs. per day. The 100-lb. limit will be effective until Framework 31 is approved. As part of Framework 31, the New England Fisheries Management Council has recommended a 400-lbs. per day limit. (a) Please explain the impact of 100-lbs. limit on Maine groundfish fleet and cod discards. (b) Do you believe that raising the trip limit to 400 lbs. will alleviate some of the adverse impacts which occurred under the lower trip limits. Please explain. (c) Do you believe that sensible trip limits are the only measure needed to provide adequate protection for cod stocks or are other measures necessary? Please explain.

Response. The 100-lb./day cod trip limit is well below any reasonable "bycatch" level, and this has and will continue to result in wasteful discard. A 400-lb./day limit is a more reasonable "bycatch" level, and as such can be used to discourage a directed fishery for cod and avoid wasteful discard of bycatch.

Our members believe that closure of specific areas (as specific as possible to minimize the size and time length) during times of spawning aggregation should be the cornerstone of every fishery management plan. The known spawning areas for cod happen to be in the fishing areas closest to the shore in the Gulf of Maine. Unfortu-

nately, this fact of nature makes closing those areas an extremely difficult burden for those fishing vessels and communities most dependent on the near shore fishing areas.

Question 3. Please explain the impact on your organization of the delay in distribution of the $5 million disaster relief funding.

Response. NMFS has determined that 50 vessels from Maine are eligible for participation in the disaster relief funding. Several of our members qualify. Most are reluctant to participate.

Our members do enthusiastically support the concept of "cooperative" research between the fishing industry and scientists, however this program is not structured to achieve that objective. Participants must first complete a rather lengthy application, then commit to participate in some undefined research project sometime in the future. Our members are reluctant or unwilling to commit to a program that does not, upfront, define the details of the type of project or the project schedule.

In short, we believe the program was poorly designed to meet the objective of spending $5 million taxpayer dollars on cooperative research.

Question 4. NMFS has been criticized for its lack of compliance with the Regulatory Flexibility Act. Other agencies, such as the Environmental Protection Agency, are required to convene small business advocacy review panels for each rulemaking that will have a significant economic impact on small businesses. (a) Please explain the impact that inadequate consideration of socio-economic factors has had on the fishing communities you represent. (b) Please explain in detail how a similar panel process, such as the one utilized by the EPA, could aid NMFS in bring economic impact analysis to the forefront of fisheries decision-making.

Response. The New England Fishery Management Council has consistently, and we believe inappropriately, used the "framework adjustment" process to circumvent the requirement to conduct socio-economic and Regulatory Flexibility Act analyses required by law. The framework adjustment mechanism is an abbreviated rule-making process designed to "fine-tune" fishery management plans, as needed. The NMFS has approved eight separate framework adjustments to the Multispecies Plan since the approval of Amendment 7 (1996); several of these have had significant economic impact, none of them have been adequately analyzed.

While I am personally unfamiliar with the panel process used by the EPA, we strongly encourage your exploration of adoption of this process for NMFS rulemaking.

Question 5. The New England Fishery Management Council has been criticized for its inability to manage meetings in a civilized manner. This has created an environment in which people may be too uncomfortable to actively participate. As a result, some proposed management measures may not receive adequate consideration. (a) Please comment on your experience at Council meetings in this regard. (b) Are there examples of good management proposals that have been set aside in favor of inadequate, but more popular, measures? Please explain. (c) What has been the result of such decisions?

Response. I have on many occasions found the absence of decorum at Council meetings to be personally intimidating and not conducive to critical thinking. The meetings surrounding the development and passage of Framework 27 (to the Multispecies Plan) are the best example. Not only was police presence necessary to maintain a semblance of civility, but several meetings dragged on until very late hours (some as late as midnight). Framework 27 was implemented in May 1999 and by June 1999 the measures proved to be inadequate when the trip limit was lowered to 30 lbs./day. It is impossible for Council members to adequately consider and evaluate the implications and ramifications of their decisions in a hostile atmosphere.

Question 6. Some question whether it is appropriate to continue to use Maximum Sustainable Yield as the target for fisheries management. (a) Please explain whether you think that there are any modifications to the management process, which would make MSY a reasonable goal. (b) Please outline alternatives to MSY as a target for management. (c) How do you view ecosystem management as it relates to the management of species at maximum sustainable yield?

Response. While MSY is a fundamentally flawed principle, we believe that some of the problems with using MSY as a target have been exacerbated by the changes the SFA made to the overfishing definition and the rebuilding schedules.

We believe that improvements could me made by: (1) amending the definition of overfishing to reinstate the "long term" capacity of a stock or, stock complex to produce MSY; (2) amending the requirement to rebuild "as soon as possible" to "as soon as practicable"; and (3) eliminating the 10-year provision or amending it so it

can be extended when a stock is projected to rebuild at the proposed fisheries mortality rate.

A particularly good example of the practical problems associated with the new overfishing definitions is the current situation with Georges Bank haddock. In 1994, over 6,000 square miles of fishing area were closed to protect (among other species) Georges Bank haddock. As recently as August 1999, the NEFMC issued a press release describing the status of Georges Bank haddock in these terms:

> Adult stock biomass has increase fourfold since 1993 and is at its highest levels since the early 1980s. Stock biomass is expected to increase from low mortality and favorable recruitment in 1998. The 1998 year class appears to be the largest in twenty years, enabling stock recovery more quickly than previously thought.

However, the status of Georges Bank haddock has been reassessed using the new SFA overfishing definition, and the Multi-species Monitoring Committee report (due Nov., 1999) will advise that the total allowable catch for Georges Bank haddock for the year 2000 must be *zero*, in order to comply with the new overfishing definition.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN F. KERRY TO MAGGIE RAYMOND

Question 1. Tom Hill has stated in his testimony that it is essential to set hard total allowable catch (TAC) limits if we are to achieve our management objectives in New England. The North Pacific Council, along with all other Councils, have set hard TACs, but the New England Council has not. Mr. Lauber and Dr. Fluharty, why did your Council decide to set hard TACs? How could you manage your fishery consistent with the SFA if you did not use hard TACs? What are the problems you would encounter?

Response. While this question is directed specifically to Mr. Lauber and Dr. Fluharty, I feel it is important to point out that the NEFMC has recommended a hard TAC for atlantic herring. A hard TAC may be appropriate for management of the herring fishery but only because that fishery is, usually, a single species fishery. The NEFMC has not used hard TACs in the multispecies fishery because the status of one species, e.g. Gulf of Maine cod, could then eliminate a fishery on a much healthier stock, e.g. witch flounder.

PREPARED STATEMENT OF WILLIAM M. DALEY, SECRETARY, U.S. DEPARTMENT OF COMMERCE

As always, I appreciate the opportunity to discuss fish with all of you. I recall one of the first conversations I had with your colleague Senator Lott. The Majority Leader told me that when I think of him, I am to think fish.

Frankly, I think fish when I think of most of you. I do not have to tell this Subcommittee about the value our fishing industry provides to this country. You all represent some of our finest coastal states and fisheries.

I have had the pleasure of being with many of you in your states. I have met fishermen on their home turf: shrimpers on the Gulf, scallopers in New England, and salmon fishermen in Alaska. And I have met with many of them here in Washington.

One of my finest experiences as Secretary of Commerce is becoming familiar with our fishing communities, and appreciating their contributions. Of understanding how the U.S. commercial fish industry generates more than $25 billion to our economy and employs 300,000 people. We are the fifth largest fishing nation, and our exports are valued at over $3 billion. It is an important recreational resource for millions of saltwater anglers.

It is my support for this resource—and the people it supports—that brings me here.

With me is Penny Dalton, NOAA's Assistant Administrator for Fisheries. She will discuss the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act—now in its 23rd year. I would like to briefly put this all in context.

It's easy to look at the past decades and see failure. Many important fish stocks are under great pressure. And we don't know enough about the health of even more.

We do know our fishing grounds can be rebuilt to support far more fishing than they do today. Scientists estimate we could increase our catches 60 percent if we manage them better.

At the same time, we must recognize it took 20 years of poor management and good-intentions-gone-wrong to bring us to where we were in 1996, when the Magnuson Act was overhauled into Magnuson-Stevens.

This Administration is committed to the philosophy embodied in the Act. I believe the best way to restore our fisheries and sustain a growing economy is through the combined participation of public, business, and government interests.

We must apply the best science—including economics and social sciences—to help fishing communities move from traditional fishing management to newer, sustainable approaches.

I have strongly encouraged NOAA, the Councils, and all the stakeholders to take advantage of the flexibility of Magnuson-Stevens to develop creative solutions and partnerships.

I have learned through my regulatory actions as Commerce Secretary there is no one-size-fits-all solution. Each case has its own set of unique circumstances, conflicts and challenges. Resolving these is not easy. These are contentious issues, as you well know. But the fact is, if we fail to come together, we will not have fishermen or fish left. Frankly, I think this is an important test of sustainable development.

Despite the challenges, I see hope in a number of small, recent successes. I think with Magnuson-Stevens we are getting back on track to build sustainable fisheries.

Let me illustrate, if I may, with the progress we are making with scallops in the Northeast. The first directive of Magnuson-Stevens is to end overfishing and rebuild fish stocks. In 1994, we were very concerned about groundfish and scallops off of New England. We took the aggressive—and painful—step of closing large areas to all fishing.

Then, in late 1998, we learned that after over 4 years of closure, scallop stocks were recovering. In other words, the closure was working to rebuild scallop stocks and it was time to start rebuilding the scallop fishery.

While Magnuson-Stevens directs us to rebuild fisheries, it also says: use the best science available when we act. Though we knew that scallops were on the way back, our science was not detailed enough to act on it. Also, many raised concerns about starting up scalloping again. Scalloping disturbs the bottom and can have lots of bycatch of groundfish that still needed protection. It looked like yet another contentious issue.

So, the first thing we did was ask for, and listen to, the advice of constituents. Soon we came together around a shared goal—scallop if possible, while protecting other fish and the habitat.

Then everyone contributed to a solution. We built an extraordinary partnership with industry and the academic community to find out exactly where the scallops were healthy and what areas could be reopened for scalloping. Also, we talked to industry about a management approach that would let scallopers catch scallops if they controlled their bycatch.

For our part, we developed a new way to fund independent observers. And I asked the Council and NOAA to make sure the regulatory process kept moving. Magnuson-Stevens is clear that the Council process is key to making management decisions. But that does not mean we can't find ways to make it flexible and responsive to urgent needs.

I am pleased to say scallopers are fishing within a formerly closed area of Georges Bank nearly 9 months earlier than scheduled. In the last 6 weeks, the fleet has landed more than 2 million pounds of scallops worth nearly $10 million. They are making money, without compromising long-term sustainability. It is good news for the economy, and good news for the environment.

My point is that the Magnuson-Stevens Act works. It does not need major changes at this time. What we need, is to continue to work collaboratively and creatively.

No question, we want to work with this Committee on addressing outstanding issues, like individual transferable quotas, and observer programs. We feel there is a need to collect more economic data to better understand and manage our fishery resources. Penny will point all of this out in her testimony.

And let me assure the Members of this Committee that I understand when we try new approaches, even though they may be incremental, there are often serious concerns from your constituents back home.

So, I want to work with you, to take into account these concerns as we move forward with developing and implementing the legislation.

Thank you for asking me here, and I ask that my remarks be included for the record.

STATEMENT OF GUY MARTIN, COUNSEL, ESSENTIAL FISH HABITAT COALITION

Madam Chairman, Members of the Committee, my name is Guy Martin, and I am counsel representing the Essential Fish Habitat Coalition. The Essential Fish Habitat Coalition is comprised of diverse non-fishing resource and business interests including, the American Forest and Paper Association, the Alaska Forest Association and the Association of California Water Agencies. Through me these organizations want to warn you of what we collectively see, as a new and virtually unlimited federal program which we fear will extend an unprecedented level of control over land use and private property in the nation. That federal program is the "Essential Fish Habitat" program, or EFH.

Your constituents will soon be at your door to express their concern with this program. Any one of your constituents, any private property owners who need a federal permit, may soon feel the sting of this new and expanding federal program. It doesn't really matter what kind of federal permit your constituent might need. It could be a permit from the Corps of Engineers for a development on the Mississippi coast or it could be for a water diversion in California to irrigate a field. It could be that your constituent want to expand her business facility in Washington but before she does she needs a Clean Water permit from EPA because rainwater runs off her parking lot into a nearby ditch.

Getting a permit approved by a federal agency is not a pleasant experience. But, if their property is in, near or might affect habitat, as very broadly defined by the National Marine Fisheries Service, they will enter a regulatory morass that can be the equal of Section 7 of the Endangered Species Act. Their project will be going into consultation with the National Marine Fisheries Service (NMFS) because you may be affecting "essential fish habitat."

How did NMFS get this authority? They weren't given it—they took it.

The term essential fish habitat or "EFH" comes from the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act—a law designed primarily to address offshore commercial fisheries. The Magnuson-Stevens Fisheries Act is administered by NMFS, an agency in the Department of Commerce. NMFS also regulates endangered species in the marine environment, and marine mammals like whales and dolphins. All of these have the common theme—oceans and marine resources. NMFS enforces the Fisheries Act, but eight Fishery Management Councils guide it.

The Councils are composed of appointed members from the fishing industry, state agencies dealing with fish, Indian tribes and in some cases representatives of the environmental community. The Council members fail to reflect any representation of land use or development interests. There is virtually no representation of interests not directly involved in fishing.

The Council system is very procedural and very administrative. Councils meet frequently. they set up technical committees on issues like fishing gear, quotas, and habitat. These committees often meet for days and make recommendations regarding those issues to the Councils, which themselves meet for days. The Councils then make recommendations to NMFS, which conducts rulemaking on the proposals. Those rules, when final, become part of Fishery Management Plans. These Plans govern the behavior of participants in the fishery—the very interests that have made the recommendations.

Plans cover many marine fish species—including anadromous species like salmon—that are fished for commercial or sport purposes. A species does not have to be rare, endangered, threatened, or even subject to any particular risk. There are over 400 species of fish subject to these Plans, including some you expect—like salmon, halibut, swordfish—and others you would not—like the spiny dogfish (a small shark), corals, etc.

Before the 1996 Fisheries Act amendments, this process was relatively self-contained. The interest groups involved in fishing activities interacted with each other, fought and compromised with each other, sued each other, and generally went on about their business. Now, thanks to the EFH program being developed by NMFS, a wide range of nonfishing activities including real estate development, forest practices, mining, water supply, and agriculture are going to affected by this process. Members of a Fisheries Management Council system that does not represent, or reflect, their interests will regulate all of these businesses and industries.

EFH was intended to be an information-gathering process-designed to identify how fish habitat was being harmed. It was, as its name implies, designed to cover habitat "essential," or especially important, to the fish species. Congress defined EFH as, "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity."

NMFS and the Councils, however, have taken this concept and greatly extended, if not distorted, it. Four twists on the concept in the Act are noteworthy:

First, NMFS interpreted EFH in its regulations to cover not only the critically important habitat one would expect necessary to be "essential," but instead concluded the designation should cover all habitat necessary to a "healthy ecosystem."

Second, NMFS concluded that the term should not be limited to the marine environment—the traditional realm of the Fisheries Act—but should be extended to cover inland waters as well.

Third, having taken the step of pushing inland, NMFS announced the need for "watershed" planning. Not only would rivers, estuaries, and wetlands be covered, but all areas that could impact those waters, including terrestrial habitat, would be included.

Finally, NMFS determined that it was not enough to cover waters where fish currently are found, but also that EFH should cover areas where fish historically were found.

NMFS took this expansive approach in its general regulations that the Councils must follow. The Councils are now developing these specific EFH designations following the NMFS guidance. This process is ongoing now, and the results are shocking. Here are some examples:

• The Pacific Fishery Management Council, governing fish species off the coasts of California, Oregon, Washington and Idaho, has proposed extensive inland habitat as EFH for salmon.

• The North Pacific Fishery Management Council is proposing to designate virtually every river that eventually touches the ocean as EFH for salmon in Alaska.

• The Mid-Atlantic Council, with the New England and South Atlantic Councils, is proposing to designate the entire inland coast from North Carolina to Florida for bluefish. This is just the southern bluefish range.

• The New England, Mid-Atlantic and South Atlantic Councils have actually listed all of the estuaries and most of the major bays and river basins on the east coast, areas like the Connecticut River and Chesapeake Bay, for bluefish.

• The Gulf Coast Council has effectively listed every bit of the Gulf Coast, its wetlands, estuaries and rivers from the tip of Florida to the border with Texas as habitat for brown shrimp.

These designations are extraordinarily broad. Essential fish habitat has become all fish habitat. Remember, there are over 400 fish species for which such designations must be made. The end result can only be that EFH will be all waters everywhere a Fisheries Act species is now, or previously has been, found.

The 1996 amendment requires federal action agencics—those that decide whether to issue a permit or carry out a program—to "consult" with NMFS to determine what the impacts on EFH will be. NMFS, in turn, "consults" with the Councils. NMFS and the Councils submit recommendations to the action agencies. If the action agencies don't follow those recommendations, they must explain why in writing. In short, a straightforward information-process was envisioned. The term "consultation," however, is a term of art. As will be described, NMFS has turned it into a complex, time-consuming, expensive process.

EFH consultation will be very similar to the cumbersome, detailed consultation procedure of the Endangered Species Act. Section 7(a)(2) of the Endangered Species Act (the "ESA") requires federal agencies "in consultation with the assistance of the Secretary [of Commerce or Interior]" to ensure that "any action authorized, funded, or carried out by the Federal government is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat of an endangered or threatened species."

Pursuant to section 7(a)(2), a federal agency involved in an action that "may affect" an endangered (or threatened) species generally begins the consultation process by preparing a biological assessment ("BA") analyzing the anticipated effects on the listed species, or initiating discussions with NMFS or the U.S. Fish and Wildlife Service ("FWS"). The agency uses this process to determine whether the action "is likely to adversely affect" a species of critical habitat. If this will happen, then formal consultation is required. As part of the formal consultation, NMFS or FWS, issue a biological opinion ("BO") examining the proposed action and the anticipated impacts on the listed species and determining whether there will be jeopardy to the species. If the BO concludes that the proposed action will jeopardize a listed species, the opinion will suggest "reasonable and prudent alternatives," if any, which NMFS/FWS believes will not cause jeopardy to the species.

If the proposed activity is not likely to jeopardize the continued existence of that species, USFWS may issue an incidental take authorization along with the BO allowing the proposed activity to proceed. If this type of "taking" is in compliance with

a section 7 incidental take statement ("ITS"), then the activity will not violate section 9's take prohibition.

The BO and take statement will also include reasonable and prudent measures as defined as required actions, identified during the formal consultation and included in the BO, which NMFS/USFWS determines are necessary or appropriate to minimize the impacts of the incidental take. Accordingly, the formal consultation develops and establishes reasonable and prudent measures, terms, and conditions to minimize anticipated incidental take, or, if necessary, reasonable and prudent alternatives to eliminate the risk of jeopardy.

The consultation processes set forth in the proposed EFH regulations are based on the process used for section 7 consultations. In actuality however, the process proposed by NMFS is significantly different from, and even in conflict with, the consultation process used by federal agencies under section 7 of the ESA. The EFH process is broader in many respects than the section 7 process and presents consequential implications for private parties impacting water bodies and associated areas containing EFH.

First, as noted earlier, the statute sets forth three separate consultation or coordination processes. First, and most important, federal agencies have a statutory requirement to "consult" with NMFS on any activity, or proposed activity, authorized, funded, or undertaken by the agency that may adversely affect EFH. Second, NMFS is required to provide EFH recommendations on both federal and state actions that could adversely affect EFH once the agency receives information on these activities. This is not necessarily a part of the consultation process; it applies independently to any information received by NMFS. Finally, FMCs are authorized to review and comment on any activities, or proposed activities, authorized, funded, or undertaken by state or federal agencies that may affect the habitat, including EFH, of any species under the FMC's authority.

The regulations set forth a complex scheme for federal agencies to consult with NMFS. There are three possible procedures for a federal agency to use in conducting an EFH consultation on an action. The choice of procedures depends on the effects of the action on EFH. If an action falls within a class of actions that NMFS has determined will have only minimal effect on EFH, the agency could qualify for a "General Concurrence" and thus not be required to undertake a consultation on an action. Alternatively, if an action will have adverse effects, but these affects can be alleviated through minor modifications, an agency may only be required to undertake an abbreviated consultation. Finally, if an action may result in substantial effects to EFH and/or will require detailed analysis to allow EFH conservation recommendations to be developed, the agency will have to undertake an expanded consultation, the most lengthy and detailed of the consultation process options.

The interagency process set forth in the proposed rule also incorporates elements of both the present process used for section 7 consultations and the NEPA evaluation process. For example, the rule provides that, to reduce duplication and improve efficiency, interagency consultation may be consolidated with interagency coordination procedures required by other statutes, including NEPA, the Fish and Wildlife Coordination Act, the CWA, and the Federal Power Act. As an example, the rule notes that an agency preparing an EIS on an action would not have to include a separate EFH assessment if the EIS already specifically and fully evaluated the effect of the action on EFH, noted that it was intended to function as an EFH assessment, and was provided to NMFS for review.

The proposed rule states that the NMFS regional offices are to develop procedures for identifying state actions that may adversely effect EFH. These offices are also required to identify the most appropriate method for providing EFH conservation recommendations to the state agency.

When an activity that may adversely effect EFH requires authorization and funding by both federal and state agencies, NMFS will provide the state agencies with copies of the EFH conservation recommendations developed as part of the federal consultation.

Finally, the rule provides that each FMC should establish procedures for reviewing state or federal agency activities that may affect habitat, including EFH of species under its authority. FMCs are encouraged to identify activities of concern by directing staff to track proposed actions, having the FMC habitat committee identify activities of concern, and entering into an agreement with NMFS to notify the FMC of activities, or similar procedures. The proposed rule recognizes that federal and state actions often follow specific timetables which may not coincide with the Council meetings and states that FMCs may want to consider establishing abbreviated procedures for the development of recommendations.

As noted above, section 7 of the ESA requires federal agencies to ensure that "any action authorized, funded, or carried out by the Federal government is not likely to

jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat of an endangered or threatened species." 16 U.S.C. § 1536(a)(2). The consultation process under this section is therefore predicated upon impacts to *species* listed as threatened or endangered under the Act or on critical habitat. Listing of species are final only after proper rulemaking procedures have been followed by or NMFS, including considerable input from the public. *See* 16 U.S.C. § 1533. Accordingly, a considerable amount of science is accumulated about the species from the time of proposed listing to the final listing to the final listing determination.

In contrast, the consultation process for EFH is predicated upon adverse impacts to the *habitat* of all species covered under an FMP. 62 Fed. Reg. 19725. Most of these species are not listed under the ESA or comparable state laws. Thus, the consultation process may be activated by potential adverse impacts to areas occupied by many species that are not otherwise protected under federal or state laws. The amount of biological knowledge about the specific habitat needs of the species triggering the consultation may often be marginal. NMFS is asking that a risk-averse approach be used in designating EHH, and the EFH consultation requirement will thus be very far-reaching.

Once an agency has determined that an action "may affect" federally listed species, a full, formal section 7 consultation will be required only if the action is likely to adversely affect the species. The mandate will then be to ensure that the action is not "likely to jeopardize the continued existence of any listed species." 16 U.S.C. § 1536(a)(2). By contrast, the consultation process under the proposed rule is initiated to assess and respond to "adverse" effects or impacts. The proposed rule does not define "adverse" effects or impacts, but identifies various activities with the potential of impacts to fish habitat sufficiently "adverse" to trigger EFH consultation, including runoff, discharge, water diversions and "conversion of aquatic habitat that may eliminate, diminish, or disrupt the functions of EFH." Proposed Rule, § 600.810(a)(2)(ii)(C). While "jeopardy" is also not specifically defined within the ESA or its implementing regulations, it is commonly accepted to be, a much higher threshold than that suggested under the proposed rule to require EFH consultation.

Section 7 of the ESA also requires federal agencies to ensure their actions are not likely to "result in the destruction or adverse modification of critical habitat of an endangered or threatened species." 16 U.S.C. § 1536(a)(2) The ESA requires designation of "critical habitat" for listed species based on physical and biological features essential to the conservation of the species and according to the best scientific and commercial data available. *Id.* §§ 1532(4), 1533(b)(2). The ESA requires, however, that the economic impacts of the proposed designation be considered prior to making the critical habitat decision. Furthermore, critical habitat designations are subject to proper rulemaking requirements, including public notice and comment.

On the other hand, identifications of EFH are apparently discretionary calls by the FMCs and not subject to any formal rulemaking requirements such as public participation. Moreover, there is no specific requirement for EFH determinations to be based on the best scientific and commercial data available. Rather, the assessments are to be made according to four "levels" of data, with the presumption of the most protection given the species with the least amount of data concerning their habitat requirements. Finally, there is no requirement that economic impacts be given any consideration in determining the presence of EFH. The proposed rule, in fact, states that EFH will always include critical habitat and may be broader than such habitat if "restoration of historic [EFH] areas is feasible, and [because] more habitat is necessary to support a sustainable fishery."

Section 7 of the ESA allows the incidental taking of listed species by federal agencies, including modifications of critical habitat which actually kill or injure listed species. The incidental taking is permitted so long as the agency follows the "reasonable and prudent measures" included in a federal biological opinion which NMFS or USFWS determine are "necessary or appropriate to minimize the impacts of the incidental take" or "eliminate the risk of jeopardy."

Unlike the ESA, the proposed rule significantly expands the extent and impact of the measures recommended by NMFS and the FMC for activities which potentially impact EFH. For example, the interim rule states that NMFS and the FMC are to provide recommendations to "conserve and enhance" EFH to state and federal action agencies. The rule explains that "EFH conservation recommendations" may include measures to "avoid, minimize, mitigate, or otherwise offset adverse impacts on EFH" resulting from actions or proposed actions authorized, funded, or undertaken by that agency. Unlike the requirements under the ESA to merely minimize the impacts of an incidental taking or eliminate the risk of jeopardy, it is clear the rule proposes to require restoration of habitats, including stream areas containing historic habitats, as a means to conserve and enhance potentially impacted EFH.

As discussed earlier, the ESA consultation process is triggered by "any action authorized, funded, or carried out by the Federal Government" with sufficient impacts to listed species or their critical habitat 16 U.S.C. § 1536(a)(2). The proposed rule, however, requires NMFS and the FMCs to review and recommend measures to conserve and enhance EFH for both state and federal actions. Although the FCMA treats this as a distinct function from consultation, NMFS appears to be merging the consultation and recommendation/commenting functions. Presumably, this will include everything from grazing leases on federal lands to state timber harvesting permits. Notwithstanding the "General Concurrence" exemption from EFH consultations, the proposed rule does not clarify in any meaningful way how the NMFS or FMCs expect to review the enormous number of federal and state permits processed which could potentially impact EFH each year. Accordingly, many state and federal permits could be stalled in the processing phase or risk challenges by interested parties for failure to adequately follow the requirements of the Magnuson Act.

This process will be on top of those that already exist, such as NEPA environmental impact review, Coastal Zone Management Act compliance, Endangered Species Act reviews, etc. Highlights include:

> The duty of the action agency to prepare a detailed "EFH Impact Assessment." This could very well be like an EIS. When a private applicant is involved, as when a federal 404 wetlands permit is required, this duty will probably be passed to the private party who will have the responsibility to pay for this analysis and ensure it is complete.
>
> Time deadlines exist, but, like the timeliness in ESA, the agencies can easily get around them. As a result, the process can greatly extend the time needed for federal permitting.
>
> The recommendations of NMFS and the Councils will become litigation fodder. Opponents of project development will be able to sue based on these recommendations. This will discourage action agencies from following any course other than what is recommended by NMFS or the Councils, and NMFS and the Councils will most likely recommend restrictions to protect habitat without reference to the economic consequences.

If your state has any activity that requires federal approval and is in EFH *or affects* EFH, you are covered. NMFS has made it clear that it intends the Fisheries Act EFH program to cover nonfishing activities. It has listed some of these: real estate development, farming, timber-harvest, road construction, mining, water development, and oil and gas.

Almost certainly this procedure will result in delays in getting permits. The cost of getting permits will increase—due to delays, due to the need to undertake consultation and prepare EFH assessments, due to the inevitable slippage in deadlines that cover the federal agencies, and due to the cost of complying with EFH restrictions. Permits are likely to be subject to new restrictions. In some cases, permits for activities are likely to be denied. And keep in mind, these are not restrictions for species in danger of extinction, they are restrictions to protect the habitat of all fished species, no matter how plentiful.

EPH could be a new litigation tool for parties opposed to development in these regions. For reference, take a look at what has happened with the ESA and NEPA. Thus, even if you get a permit that can be lived with, there is no guarantee a lawsuit will not be brought to protect EFH, especially if a NMFS/Council recommendation is not adopted.

All of this, everything I've discussed must be viewed in light of the fact that NMFS has chosen to implement this program and impose these new requirements without publishing a single final regulation. In order to protect their decisionmaking from review, NMFS has conducted everything we've noted in this testimony under interim regulations. Public notice of the decisions of the FMC's has been spotty, varied and without the regimen one expects of a system designed and calculated to give the public notice of the activities of government.

Any program instituted outside of Congress's intent, designed to greatly expand an agency's authority, is something this Committee and this Congress should be concerned about. This program has been designed not to protect endangered and threatened species. This program has not been designed to protect critically important habitat of species. This program, quite simply, has been designed.

Ronald Baird, director of NOAA's National Sea Grant Program, made NMFS's plans clear when he said last August, "This is the most significant piece of environmental legislation since the Clean Water Act of 1972. The full implications of essential fish habitat are not widely appreciated by the public. They will be shortly."

STATEMENT OF ROBERT ALVERSON, MANAGER, FISHING VESSEL OWNERS ASSOCIATION

Mr. Chairman, on behalf of the Fishing Vessel Owners Association ("FVOA"), I would like to thank you for the opportunity to provide this statement. The FVOA is a trade association representing the owners of 84 hook-and-line fishing vessels that operate in fisheries from California to Alaska, and in the mid-Pacific Ocean. Our fisheries include halibut, sablefish, and Pacific cod in the Bering Sea and Gulf of Alaska, and sablefish off the coasts of Washington, Oregon, and California, as well as albacore within and beyond the United States Exclusive Economic Zone in the Pacific Ocean. Although I am, at present, a member of the Pacific Fishery Management Council, and I am a former member of the North Pacific Fishery Management Council, I provide this statement solely in my capacity as Manager of the FVOA. I note that the Deep Sea Fishermen's Union, which represents the crewmen on vessels owned by FVOA members, has endorsed this statement.

SUMMARY

The FVOA and DSFU believe that the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801, et seq.) have provided, in several respects, the basis for improved management of our nation's fisheries. The Act's National Standards on safety (National Standard 10, 16 U.S.C. 1851(a)(10)) and bycatch (National Standard 9, 16 U.S.C. 1851(a)(9)), are notable for the focus that they have provided on critically important aspects of fisheries management. The FVOA and DSFU were joined by the Alaska Crab Coalition ("ACC") in first proposing the enactment of these new National Standards, and in securing wide support among Washington State and Alaskan fishing industry organizations. The FVOA, DSFU, and ACC also contributed to the development of conservation-related amendments to the then Magnuson Act in 1990.

The habitat provisions of the 1996 amendments have contributed to the progressive management of our fisheries. In particular, these provisions have helped to draw attention to the need for actions to reduce the impacts of trawling on the benthic environment, which serves as nursery grounds for valuable species of fish. The FVOA, DSFU, and ACC took the initiative among fishing industry groups to propose habitat-related amendments during the process leading to the 1996 amendments.

Most importantly for the FVOA and DSFU, the 1996 amendments preserved the Individual Fishing Quota ("IFQ") program that had been established for the halibut and sablefish fisheries off the coast of Alaska. This program, after seven long years of preparation by the North Pacific Fishery Management Council and the Department of Commerce, ended the deadly and damaging open access fishing derbies. IFQs have been the great success that their proponents had predicted from the outset of the development of the program.

Based on the very favorable experience in the halibut and sablefish fisheries, the FVOA and DSFU believe that individual transferable quotas should be available for application to any fishery in the United States Exclusive Economic Zone. Therefore, the FVOA and DSFRI urge Congress to allow the statutory moratorium on individual quotas to expire in accordance with its terms. 16 U.S.C. 1853(d)(1). This position is strongly supported by the ACC, as well as by all the regional fishery management council chairmen. Equally notable is the fact that the report to Congress by the National Research Council of the National Academy of Sciences, as directed by the Congress in the 1996 amendments (section 108(f), P.L. 104–297) definitively describes the benefits of individual fishing quotas. Executive Summary, Prepublication Copy, December 18, 1998.

The FVOA and DSFU also ask Congress to extend to the Pacific Region the research plan provisions of the Magnuson-Stevens Act. 16 U.S.C. 1862. As discussed further, below, there is an urgent need for a comprehensive observer program in the depressed groundfish fisheries off the Pacific Coast. There is simply no other way to obtain reliable data on bycatch of depressed, and even threatened, species. While there is a reasonable expectation of some Federal funding for such a program, fees on industry may become necessary. The fishing industry stands to benefit from improved conservation of our public resources. Consequently, the industry should be prepared to pay for the needed observer program, if federal funding is inadequate or unavailable. Playing Russian Roulette with our fisheries has proved disastrous to important groundfish species and to the industry that has depended on them. We must have observer data in order to manage our fisheries with confidence that we are doing the right things.

Conservation

Replacement of the open access race for fish by the halibut/sablefish IFQ program has resulted in improved conservation management. The incidental catch of groundfish in the sablefish fishery has dropped by 39 percent. Halibut mortality due to lost fishing gear has decreased by 59.65 percent (translating to an average $3.5 million saving, annually).

Incidentally caught sablefish is no longer discarded in the directed halibut fishery. Sablefish in the western and central Gulf of Alaska is now fully harvested, not only avoiding waste, but also generating an economic gain for the industry (an average $3.93 million gain, annually).

These improvements accord with the principal purpose of the Magnuson-Stevens Act, which is conservation, and with a major objective of that statute, minimizing bycatch and related mortality. 16 U.S.C. 1851(a)(1),(9).

Safety

Replacement of the open access race for fish by the IFQ Program has greatly improved the safety of life in the halibut and sablefish fisheries off the Alaskan coast. The former halibut fishing derby was the second most dangerous occupation in the United States (preceded only by the Bering Sea crab fisheries).

As noted above, the Magnuson-Stevens Act requires that fisheries management promote the safety of human life at sea. 16 U.S.C. 1851(a)(10).

Communities

Community development quotas, which are integral to the halibut/sablefish IFQ program, have assured isolated, low-income, Alaskan native coastal communities a major source of employment and revenue. At the same time, economic and social disruption of other communities has been avoided; the top five halibut ports and the top four sablefish ports remain the same as under the open access system. Small vessels serving minor ports have been guaranteed their place in the fisheries, and an industry fee-based loan program has been established for the owners of those vessels and for new entrants to the fisheries. In short, this IFQ program has increased the overall value of the fisheries, making it possible to dedicate a portion to the poorest communities, without adversely affecting the others.

The Magnuson-Stevens Act requires that fisheries management take into account the interests of fishing communities. 16 U.S.C. 1851(a)(8).

Overcapitalization

Excess capacity in fisheries has been identified as one of the fundamental causes of resource declines, unsafe conditions, lost economic efficiency, and lower quality product. The halibut/sablefish IFQ program has resulted in a reduction of the halibut fleet from 3,450 (1994) to 1,601 (1998). Restricted Access Management ("RAM") Report, NMFS, 1999. Conservation risk associated with fishing pressure on the resources has declined radically. Unsafe conditions due to 24-hour halibut derbies and 2-week sablefish seasons have disappeared, as fishermen have gained the opportunity to conduct their operations in periods of good weather during 8 months of the year. Longer seasons have led to full-time employment on vessels and in processing plants, and higher fish values have resulted in better lives for vessel owners and crews. Slower paced fisheries have allowed much improved handling of the catches, and thus, better quality product for the consumer.

The Magnuson-Stevens Act provides for consideration of economic efficiency, and for reduction of excess fishing capacity. 16 U.S.C. 1851(a)(5), 1861a (a)-(e). It is reliably estimated that a government-funded buyback achieving what was accomplished by the halibut sablefish IFQ program would have cost the taxpayers approximately $318.8 million.

Greatest Overall Benefit to the Nation—Conservation, Safety, Efficiency, Quality, Value

In addition to achieving improved conservation, safety, and efficiency, the halibut/sablefish IFQ program has resulted in improved product quality and higher product value. The slower paced fisheries have translated to greater availability of higher quality product, in particular, fresh halibut for 8 months, instead of a few days of the year, and greater bargaining power for U.S. producers in the sablefish export market. Landings of halibut provide a continuous supply of product for 8 months, averaging about 12 percent of the harvest per month. The same is true for sablefish. RAM Report, NMFS, 1999, page 12.

The Magnuson-Stevens Act requires that fisheries management achieve the greatest overall benefit to the Nation. 16 U.S.C. 1851(a)(1); see 16 U.S.C. 1802 (28)(A).

When the North Pacific Fishery Management Council recommended approval by the Secretary of Commerce of an IFQ system for the halibut and sablefish fisheries, it was on the basis of an administrative process involving extensive debate and intensive analysis. The Council had considered an array of possible management responses to conservation, social, and economic factors at work in the then open access fisheries.

These factors were identified, as follows:

- Allocation conflicts;
- Gear conflicts;
- Fishing mortality and other costs due to lost gear;
- Bycatch loss of halibut and sablefish in other fisheries;
- Discard mortality for halibut and other retainable species in the halibut and sablefish fisheries;
- Excess harvesting capacity;
- Product quality, as reflected in halibut and sablefish prices;
- Safety of fishermen;
- Economic stability in the fixed gear halibut and sablefish fisheries and affected communities; and
- Rural coastal community development of a small boat fishery.

The Council ultimately determined that the IFQ system would be the best management response to these factors. This paper addresses the performance of that IFQ system in relation to those factors.

Allocation Conflicts

Allocation conflicts between the operators in the halibut/sablefish fisheries generally were found in skirmishes involving halibut. Prior to implementation of the IFQ program, the allocation issues centered around manipulations of when specific area openings would take place in order to advantage or disadvantage various groups.

In the Bering Sea/Aleutian Islands area, there evolved a series of complex clearing procedures designed to make it more inefficient for non-Alaskan-resident-operated vessels. This included such regulations, in the Pribilof Islands area, as constraining trip limits and a requirement that non-resident vessels deliver to Dutch Harbor. This, of course, gave the local fishermen additional fishing time. Similar clearing requirements were established for the Eastern Bering Sea, Area 4E, and the area known as Area 4B in the Aleutian Islands.

The annual meetings of the International Pacific Halibut Commission ("IPHC"), were prolonged for hours on the question of when to have the spring and fall 24-hour openings. Some of the issues that drove this debate were as follows: Were the Canadian or the United States fishermen going to open first to get an advantage on price; would the spring opening conflict with the spring herring opening in southeast Alaska; would the openings conflict with western peninsula salmon seasons; would openings occur during big tides; would openings put product at the docks in Alaska at the right time for the Sea Land ships; would the fall opening conflict with the State of Alaska sablefish openings; and would that opening conflict with the Russian Orthodox holidays?

None of those issues, which were debated with emotion and zeal, has arisen since the implementation of the IFQ program. When the IFQ program was adopted, the onerous clearing requirements and trip limit regimes in the Bering Sea district were removed (though there are still clearing requirements they are not of an allocative nature). Former Governor of Alaska, Walter J. Hickel, correctly observed of the IFQ program, "Ultimately the free market decides. . . ." Letter from Walter J. Hickel to Bob Alverson, August 27, 1997. All of the concerns of when to fish or not to fish that the industry and fisheries managers debated at length prior to implementation of the IFQ program, are now the business decisions of each and every vessel owner, subject to conservation management regulations.

Gear Conflicts

The supplemental environmental impact statement ("SEIS") for the halibut/sablefish IFQ program stated:

> Although an IFQ program will tend to decrease gear conflicts within the halibut and sablefish fishery, it may increase gear conflicts between halibut or sablefish fishermen and other fishermen by increasing the areas and length of periods in which such conflicts can occur. For example, it is less costly for trawlers to avoid the halibut grounds during brief halibut openings than to avoid these areas most of the year. Similarly, the areas and times with a high risk of gear

conflicts are easier to identify and avoid with the current intensive halibut fishing periods than with an IFQ program. No attempt has been made to estimate the magnitude of this effect. SEIS, page 2–7.

Halibut fishermen no longer have gear conflicts with sablefish fishermen. The best sablefish grounds are usually located on the outer continental shelf, or at about 350 to 600 fathoms. The halibut fishery is conducted generally between 100 and 250 fathoms. The IFQ fishery better allows the participants to target where the fish are located. The time available for the fishermen to decide where and when to set gear allows avoidance of other fishing operations, particularly now that the grounds for halibut and sablefish are no longer saturated with gear.

The statement, "it is less costly for trawlers to avoid the halibut grounds during the brief halibut openings, than to avoid these areas most of the year", is ironic, because the reverse has turned out to be the case. It is very costly for trawlers to avoid halibut grounds, because the trawl groundfish seasons have become very short. This is particularly true in the Gulf of Alaska. Should trawlers inadvertently get into a school of halibut or area where halibut gear is set, the trawl fishermen do not have the time to make optimum adjustments. If the trawlers had the time to make those adjustments, the bycatch and potential gear conflicts could be further reduced.

As it stands, now, the longline IFQ fishermen have adequate time to harvest their quota shares and can avoid most of the intense trawl activity. In fact, the pacific cod fishery in the Gulf of Alaska has been shortened, so that it ends about the time the March 15 IFQ fisheries start, with the result that few, if any, gear conflicts have been occurring with that directed fishery.

The openings set forth below were provided the trawl fleet in the Gulf of Alaska during 1995 and 1999. The reader can easily see that fishing time is now at a premium to the trawl fleet, as it was to the halibut and sablefish fishermen prior to the IFQ program. The loss of fishing gear, particularly someone else's, becomes a low priority, when fishing time becomes a high priority.

1995		
Pacific Cod	Western Gulf	January 20 to March 17
(inshore)	Central Gulf	January 20 to March 22
Pollock	Western Gulf	January 20 to February 2
		June 1 to June 2
		July 1 to July 2
		October 1 to October 1 (12 hours)
	Central Gulf	January 20 to January 24
		June 1 to June 5
		July 1 to July 5
		October 1 to October 4
S.E. Alaska Pacific Ocean Perch		July 1 to July 9
		Plus two days in October

1999	Sector	Area	in the Gulf of Alaska
Pacific Cod (Trawl)	Inshore	610	Opened 1/20/99 Closed 3/8/99
	Inshore	620&630	Opened 1/20/99 Closed 3/14/99
	Offshore	610	Opened 4/18/99 Closed 6/7/99
Pollock (Trawl)	Inshore	630	Opened 1/20/99 Closed 1/27/99
	Inshore	610	Opened 1/20/99 Closed 1/31/99
	Inshore	620	Opened 1/20/99 Closed 2/17/99
	Inshore	640&650	Opened 1/20/99 Closed 3/6/99
	Inshore	610	Opened 6/1/99 Closed 6/7/99
	Inshore	630	Opened 6/1/99 Closed 6/10/99
	Inshore	620	Opened 6/1/99 Closed 6/11/99

In summary, the SEIS predicted less gear conflicts, and this has occurred The SEIS' contemplation of IFQ harvesters having conflict between one another has not occurred, largely because sablefish and halibut operations take place at different depth strata, and because of the 8 months of fishing time, halibut harvesters can afford to communicate with their fellow fishermen and avoid each others' gear. The

same applies for sablefish harvesters. The conclusion of the SEIS about trawlers has turned out to be just the reverse of actual experience. The trawl derbies have increased the trawlers' cost of avoiding gear conflicts.

Fishing Mortality and Other Costs Due to Lost Gear

The SEIS correctly predicted the following with regard to gear loss and related fishing mortality:

> There are several reasons why an IFQ program is expected to decrease gear losses and the associated costs. First, it would reduce the amount of gear that is on the grounds at any one time, and therefore, reduce the amount of gear that becomes tangled. Second, it would increase the willingness of fishermen to take more time to avoid tangling gear and to retrieve lost or tangled gear. It would do so by decreasing the opportunity cost of the time required either to set gear so that it is less likely to become tangled or to retrieve it. Third, it would eliminate the current gear losses that occur because fishermen set more gear than they can retrieve before the end of the brief halibut openings. Finally, it would allow fishermen to fish at a pace and in areas, time periods, and weather conditions that decrease gear losses." SEIS, pages 2–6.

The SEIS stated, "There are principally two types of costs associated with gear losses in the halibut and sablefish fishery. There are (1) cost of replacing lost gear, and (2) harvest forgone due to the fishing mortality caused by the lost gear." (Id.) The SEIS estimated that, in 19907 1,860 skates of gear and two million pounds of halibut were lost. (Id.)

In its annual reports, under the category of waste, the IPHC includes the mortality of halibut due to lost gear. In the 1994 Annual Report, waste was recorded at 2.85 million pounds. The 1995 and 1998 Annual Reports recorded waste as 1.0 and 1.9 million pounds, respectively. This represents a 48 percent average reduction in waste, or an annual savings of approximately 1.4 million pounds of halibut. This compares impressively with the 50 percent saving predicted by the SEIS. Based on the 1999 Seward, Alaska price for halibut (approximate average, $2.10/lb), the saving due to reduced waste is approximately $2.94 million.

The lost fishing gear in the halibut derbies was primarily the result of 4,000 to 6,000 vessels setting their gear all at the same time, and the gear becoming entangled. Gear lost in this manner is a thing of the past. The SEIS estimated the value of lost gear at $2.0–$2.4 million per year in the halibut derbies. SEIS, pages 2–6. Under the IFQ program, the vessels share the grounds over an 8-month season. Gear can be lost due to the normal hang-up on the bottom, but the large amounts of gear lost during the halibut derbies from gear conflicts has come to an end.

There has also been a saving in the amount of gear purchases for each vessel each season. It was not uncommon for vessels to pre-bait and set 80 to 130 skates of gear during a derby opening. Vessels are now fishing with 50 to 70 skates of gear. Additionally, the vessel operators, prior to IFQs, used two different types of gear—one for halibut and one for sablefish Many harvesters are now using their sablefish gear to harvest the halibut quotas, further reducing gear-related costs to the fleet.

The SEIS predicted a 50 percent reduction in gear needed to harvest the same amount of fish. (SEIS, pages 2–7.) That document properly predicted that significantly less gear would be set out.

The open access sablefish fishery had similar problems with lost gear; however, the SEIS did not quantify the loss. It is reasonable to conclude, based on the halibut experience, that the lengthened sablefish seasons under the IFQ program have also resulted in lower gear losses and associated resource mortality than prevailed in the open access fishery.

In summary, fishing mortality of halibut due to lost gear has resulted in at least a 48 percent reduction in waste recorded by the IPHC, with a net benefit of $2.94 million annually to the fleet. The IFQ program has resulted in much less gear being set to harvest the quota.

Bycatch Loss of Halibut and Sablefish in Other Fisheries

Prior to the implementation of the IFQ program for sablefish and halibut, the length of the seasons had shortened to a point of causing chaos. The sablefish fishery had collapsed from a 9-month season to a less than a 10-day fishery in the western Gulf of Alaska, and to a 5-day season in southeast Alaska.

By 1994, the halibut fishery had become two 24-hour openings, one in the spring and one in the fall. In the mid-1970's, the halibut season had been 9 months. By the 1990's, when fishermen harvested sablefish, they were required by regulation to throw away their incidentally caught halibut, and during the halibut derbies, the fishermen were required to throw away the incidentally caught sablefish. The mor-

tality associated with this regulatory bycatch was deducted from the available commercial harvests.

The IPHC recorded the halibut mortality in the directed sablefish fishery by the use of the observer program. The average halibut mortality in the longline sablefish fishery for each of the five seasons preceding the IFQ program was 1,816,000 pounds. The bycatch mortality, after the IFQ program was implemented in 1995 was recorded at 297,000 pounds. This represented an 84 percent reduction in halibut mortality, or a reduction of 1,519,000 pounds annually. There have been no updates in the NMFS data base since 1995, but there is no reason to expect that the experience has changed since then.

The reduction resulted from a variety of several factors. Two of the more important ones were: (1) the fishery slowed down, and juvenile halibut were able to be released with better care, and thus with lower mortality, and (2) the adult halibut were now allowed to be taken and counted against the quota. (Juvenile halibut are not allowed to be landed; they are defined as being less than 32 inches long.)

Similar information is not available to quantify what has taken place with incidentally caught sablefish. The directed halibut fishery is generally conducted in a shallower habitat than that in which the sablefish are usually found, so the numbers of sablefish saved in the halibut fishery would probably not be as great as the numbers of halibut saved in the directed sablefish fishery. (The deep-water sablefish habitat does, however, have substantial numbers of halibut in the late winter and spring.) The important point is that the fleet is now landing incidentally caught sablefish. That was not the case prior to the IFQ program.

The reduction in halibut mortality in the directed sablefish fishery of 1,519,000 pounds represents approximately a $3.2 million gain to the longline fishermen, assuming an average 1997 price of $2.10 per pound. As noted above, prior to the IFQ program, this now-retained bycatch was discarded and deducted from what might be available for commercial harvest.

There has been an additional saving to the longline fleet with the implementation of the IFQ program. Prior to 1995, the longline sablefish fishery operated in the Gulf of Alaska with a halibut cap of 700 metric tons. Once this bycatch mortality was accounted for, with the help of the observer program, the directed sablefish fishery was closed. This had the effect in the western Gulf of Alaska, and at times the central Gulf, of stopping the harvest of sablefish, in order to protect halibut. The ability under the IFQ program to keep the sablefish fishery open in the Gulf of Alaska in each of the years, 1995, 1996, 1997, 1998, and 1999, has allowed for the western Gulf of Alaska harvest level to be fully achieved, and the central Gulf quota to also be harvested. For 1997, in the western Gulf of Alaska, the harvestable amount of sablefish quota shares amounted to 1,690,222 round pounds, representing an additional $3.93 million to the fleet. (Price $3.70/dressed, 63 percent recovery.)

In summary, the IFQ program has allowed the fleet to recapture the lost harvest of halibut that was occurring due to sablefish operations. This gain amounts to an average of $3.2 million annually since the inception of the IFQs. The program additionally allows for the full harvest of sablefish in the western and central Gulf of Alaska, providing an average annual gain of $3.93 million.

Discard Mortality for Halibut and Other Retainable Species in the Halibut and Sablefish Fisheries

"Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch." 16 USC 1851(a)(9).

Congressional interest and intent with respect to bycatch reduction was clearly reflected in the Senate and House floor debates in the 104th Congress. Senator Stevens declared that, "Under S. 39, the councils will . . . be required to reduce the amount of bycatch in every fishery around our country." (Congressional Record, September 18, 1996 at S10810). He also stated, "We thought Americanization would go a long way toward conserving the fishery resources of this Nation. Foreign vessels have now given way to U.S. vessels that are capitalized now far beyond what we ever envisioned in the seventies, and the fisheries waste continues to get worse in many areas." Id. Senator Murkowski stated, "This will put us on the road to stopping the shameful waste that is currently occurring in many fisheries." (Id. at S10820.) Senator Gorton remarked, ". . . I join my colleagues in lauding those provisions that aim to reduce waste and bycatch in the fisheries. . . ." Id. at S10814.

On the House floor, Congressman Young, principal author of H.R. 39, and Chairman of the committee of jurisdiction, stated, "The reduction of bycatch in our fisheries is one of the most crucial challenges facing fisheries managers today." (Congressional Record, September 18, 1995 at H9116.) On passage of S. 39, he stated, ". . . the bill recognizes that bycatch is one of the most pressing problems facing

the continuation of sustainable fisheries. . . .'' (Congressional Record, September 27, 1996 at H11438.)

Janet Smoker of Fisheries Information Services (''FIS'') completed a review of the IFQ directed sablefish fishery in the Gulf of Alaska relative to the retention of various species caught incidentally. The FIS report examines the 1994 season against the IFQ seasons of 1995, 1996, and part of 1997. The following conclusions were based on the North Pacific Fishery Management Council's observer program.

While conducting a directed fishery on sablefish, some of the target catch is discarded. The retained sablefish has always been high, according to the report. The retained sablefish in the directed longline fishery for sablefish during 1994 was 96.8 percent (a number that is hard to improve upon), and during the 1995, 1996, and 1997 seasons averaged 97.03 percent.

One observation concerning the small difference in retained bycatch between the open access period and the IFQ fishery is that there has been very little ''high grading'' in the IFQ fisheries, indeed, less than in the pre-IFQ fisheries. High grading had been a concern with respect to the IFQ program, when it was under development.

The SEIS noted several very important points relative to this subject. Vessel profit would increase 6 percent, if sablefish under 4 pounds (eastern dressed weight) were discarded, but in so doing the number of fishing days would increase 70 percent. SEIS, page 2–14. The fishermen would have made more money, but would have worked many more days.

The observer statistics compiled by FIS, which indicate a 97.03 percent retention of sablefish, suggests that the SEIS was accurate. High grading, which means catching the 16 fish at least twice, is not economical.

The FIS report also indicates that the directed sablefish fishery during the 1994 season was retaining 75.5 percent of all groundfish, inclusive of sablefish that was being caught. The next three seasons under the IFQ program increased the total groundfish retention to 84.9 percent of all groundfish species. Discards of groundfish declined from 24.5 percent of the catch to an average of 15.03 percent of the catch, representing a 39 percent reduction in discarded groundfish.

The retention of groundfish, not including sablefish, increased from the 1994 season level of 25.7 percent to an average of 34.6 percent during the 1995, 1996, and 1997, seasons. This represented a 35 percent increase in groundfish retention, not including sablefish.

The halibut discards that occur during the directed sablefish fishery have gone from 21.1 percent in 1994 to an average of 13.03 percent during the 1995, 1996, and 1997, seasons. This represented a 38 percent decline in halibut discards. Discards of halibut under the IFQ program in the directed sablefish fishery are largely halibut that are less than the legal size for retention.

The discards of rockfish and pacific cod in the IFQ fisheries are significantly the result of the rockfish and cod quotas being achieved during the race for fish in those fisheries, which then result in regulatory discards for the remainder of the year for IFQ fisheries. The majority of groundfish discards in the IFQ fisheries are flounders and skates, for which markets have not yet been adequately developed.

In summary, according to the cited evidence and analysis through 1997, the retention of sablefish has remained in the 97 percent range suggesting very little, if any, high grading. The discards of groundfish in the directed sablefish fishery reduced 39 percent, for a 84.9 percent retention of everything caught. The fish currently discarded are primarily skates and flounders for which markets are not available. The halibut discards in the sablefish fishery declined 38 percent. The IFQ program has, therefore, helped reduce bycatch significantly. Data for 1998 and 1999 are not available.

Excess Harvesting Capacity

The SEIS made a number of comments with regard to excess harvesting capacity. ''The fact that there are too many vessels has been identified as a problem.'' (SEIS, page 2–52.) ''The Council has considered the introduction of a quota system as a means to enable vessels to leave the industry to receive some recompense through the sale of quota shares for so doing.'' Id. ''It is hoped that following introduction, transfer of quotas will lead to less efficient vessels leaving the industry.'' Id.

In 1994, the number of vessels participating in the sablefish fishery opening numbered 1,139, and in the halibut fishery, 3,450. The number of vessels participating in the sablefish fishery in 1995, 1996, 1997, and 1998, were 517, 503, 504, and 449 respectively. The corresponding numbers of halibut vessels were 2,057, 1,962, 1,925, and 1,601. (RAM Report, NMFS, 1999, page 27.)

The reduction of vessels as envisioned by the SEIS is working and is being accomplished without any Federal buy-back assistance. The fleet is using the equity value

of quota shares to buy itself out. The FVOA estimates that, in order for the Federal Government to have achieved a fleet reduction in the halibut fishery from 3,450 vessels in 1994, to 1,601 in 1998, a reduction of 1,849 vessels, it would have cost at least $172,432 for each vessel and its potential harvest of fish This means that the halibut fleet has self-rationalized itself in the amount of $318,822,000 ($172,432 × 1,849 vessels) in 4 years, without any Federal assistance.

There are no mechanisms comparable to IFQ's in terms of cost effectiveness in reduction of a fleet. The taxpayer cost of one New England buy-out was $23 million, and the impact was minimal.

One of the options the North Pacific Fishery Council seriously looked at, when it was considering whether to adopt IFQs for the halibut fishery, was a license limited entry program that would have reduced the halibut fleet from 5000 vessels to less than 1000 vessels. This option would have provided no compensation to the 4000 vessel operators eliminated from the fishery, and accounts, in large part, for the adoption of the IFQ alternative.

Product Quality, as Reflected in Halibut and Sablefish Prices

The SEIS made numerous predictions regarding the expected effects on product quality, the availability of fresh halibut, and ex-vessel prices. One of the primary goals of the IFQ program was to provide high quality fresh halibut on a continual basis. The 24-hour openings in the derby fisheries limited the ability of fishermen and processors to provide fresh halibut to brief periods of the year, and to very few customers. For example, the Hotel Captain Cook, in Anchorage, Alaska, had to import fresh halibut from Canada to supply its customers, even though Alaska produced more halibut than did any other place in the world. ". . . I mention the Crow's Nest Restaurant in the Hotel Captain Cook, which has a reputation of serving nothing but fresh halibut. Prior to IFQs, most of the year we flew fresh halibut in from Vancouver." (Letter from the Honorable Walter J. Hickel to Mr. Bob Alverson, August 27, 1997.)

The SEIS had the following specific expectations with regard to the IFQ program. First, the program would provide the flexibility in scheduling landings that is necessary for fishermen and processors to take advantage both of the latent year round market for fresh halibut and the seasonal consumption patterns for sablefish, and to decrease storage time and costs for the halibut and sablefish that are frozen. Second, the program would increase the quality of landed halibut and sablefish, by decreasing the opportunity cost of the time required to assure that the catch is quickly dressed and cared for. Third, the program would eliminate the brief, intensive openings that result in such large concentrations of landings that unloading and processing delays can decrease product quality and prices. (SEIS, page 2–4.)

Flexibility in scheduling landings to take advantage of a year-round market for fresh halibut and seasonal consumption patterns is evident from the IPHC monthly landing reports for the 1995 through 1998 seasons. (RAM Report, NMFS, 1999, page 12.) The fleet has spread its landings over the entire time provided, all 8 months. This has allowed the fresh fish market to absorb approximately 75 percent of the harvest. The initial forecast by the SEIS was 50 percent. (SEIS, page 2–5.)

With regard to storage costs and savings, the SEIS stated, "If 75 percent of landings currently are frozen and if an IFQ program would result in only 50 percent being frozen, the cost savings in 1990 would have been $4.2 million ($0.32 per lb. × 25 percent of 52.6 million lbs.)." (SEIS, page 2–5.) With 75 percent of the harvest now going to the fresh markets, cold storage saving in terms of 1990 dollars is $9.8 million. ($0.32 per lb. × 50 percent of 61,200,000 lbs. (1999 quota)). This saving thus is over twice that forecasted by the SEIS. Additionally, in terms of product quality, the SEIS assumed, on average, that halibut was frozen 6 months a year. This is no longer the case, and the quality is, therefore, higher than anticipated.

The SEIS stated, "The price increase for sablefish is expected to be less than for halibut, because the potential benefits from the fresh fish market are probably less for sablefish". (SEIS, page 2–5.)

The SEIS greatly underestimated the Japanese frozen market for sablefish, and the marketing advantages that IFQs gave U.S. fishermen, in terms of negotiating leverage in this foreign market. . . . (Harvest guidelines have decreased as well, which has put an upward pressure on prices.) Japan consumes over 97 percent of the U.S.- and Canadian-harvested sablefish. Since the establishment of the IFQ program, the sablefish price has steadily increased. The 1997 average price to fishermen would conservatively be estimated at $3.70 per dressed pound. The NMFS assumes a 63 percent recovery rate between dressed and round sablefish, therefore in terms of round weight, the price would be $2.33 per pound.

The SEIS estimated that the round pound price for sablefish would increase $0.05. That document stated, "In 1991, this would have been a $0.05 per pound

round weight increase in the ex-vessel price or about a $2.8 million dollar increase in ex-vessel value." (SEIS, page 2–5.)

The price for dressed sablefish in 1991, based on the SEIS, was $1.59 per dressed pound or $1.00 per round pound. The 1997 round price of $2.33 converts to a 1991 price of $1.98, using a consumer price index regression of .849. In terms of 1991 dollars, the IFQ program added $0.98 per round pound to the price of sablefish. In terms of the allocated 1997 quota shares, the added value to the resource is $29,629,207, in 1991 dollars. ($0.98 x 30,233,885 1997 round pounds) The prediction of a $2.8 million gain, therefore, was very greatly underestimated. In terms of taxes to the State of Alaska, under the 3.3 percent raw fish tax, the gain has been $957,000 per year on the average, through 1997.

With respect to halibut the SEIS predicted the following: "In summary, it is estimated that an IFQ program would increase halibut ex-vessel prices by $0.04 to $0.68 per pound. Given the 1990 landings of 52.6 million pounds, the resulting increase in the ex-vessel value of the fishery would have been from $2.1 million to $35.8 million." (SEIS, page 2–5.)

The SEIS used a 1990 value for halibut at $1.78 per pound. The prices for halibut since the IFQ program was initiated in 1995 has been in the $1.90 to $2.40 range in the Seward Alaska area. Prices in the Seattle area are generally 35 to 60 cents above Seward prices, largely reflecting transportation costs. Assuming an average price for 1997 of $2.25 per pound, and using a consumer price regression of .814, the 1990 value would have been $1.83 per pound. Hence the added ex-vessel value to the industry in terms of 1990 dollars is approximately 5 cents. This would mean an added ex-vessel value to the fishermen of $2.5 million. Consequently, although there has been, in fact, an increase in price paid to the fisherman, the amount has been at the lower end of the prediction.

It should be noted, however, that this value may be somewhat misleading, in that the halibut industry has completely changed since the implementation of the IFQ program. There are no more long lines of fishing vessels waiting to deliver halibut. Processors no longer have product stacked on their processing floors for days at a time because freezers are too full. Halibut is now being flown to markets all over the United States and Europe. Prior to the IFQ program, containers of frozen halibut were transshipped to the Seattle area for redistribution. Now, significant amounts of halibut are air freighted out of Anchorage, Alaska. There has been an added cost in air transportation to get good quality fresh fish to distant markets, which does not readily appear as an additional value when only looking at the price the fishermen receives. There are new businesses in air-freighting as well as long-haul trucking out of Anchorage that were not envisioned prior to the IFQ program.

The industry has been revolutionized, and the most important quality aspect for halibut of the new system is shelf life. The better the quality at the boat, the longer the fresh fish can be available to consumers. The need for good quality to ensure shelf life for halibut now is the driving force on prices paid to the harvesters. A letter from Dory Seafoods states:

> The majority of the high quality buyers want to know when was the fish caught and how old will the oldest fish be when it is received in the market place. Many buyers will not buy old fish, or if given a choice, they will pay more for fresher fish with a longer shelf life.
>
> I believe the overall quality has improved on air shipments out of Alaska. The fishermen have more time to dress, ice and take care of the product on board the fishing vessels. In addition, the processing plants are receiving smaller quantities per day and, in most cases, are able to ship the product out the same day as received. As a result, the halibut is handled much quicker and received in the market place in better shape than in pre-IFQ years. [Letter from Dory Seafoods to Robert D. Alverson, August 28, 1997.]

There have been complaints from several shore-side processors that they are not doing well under the IFQ program. It is clear that the raw product cost has not changed very much for halibut from the 1990 prices. It is also evident that the frozen market nature of sablefish makes all ports competitive for sablefish. More importantly, as shown below, the landings per port have not changed materially. What the fishermen do notice is that those processors that have available to them good and reliable transportation, either air or long-haul trucking routes out of such locations as Anchorage seem to be very competitive for halibut. Those who have chosen as a business decision not to be active in fresh fish marketing probably have lost market share. Processors in western Alaska and the Dutch Harbor area have some access to the fresh markets, but with more difficulty. In these areas, the landed halibut generally reflects a frozen product price. In the case of sablefish, the product

must be frozen for export to Japan, and therefore, all Alaskan ports with freezer capacity should be able to participate in that fishery.

Sablefish is unique, in that the final destination is Japan or other Asian markets. Sablefish has very few fresh fish sales. The nature of the flesh quality and high oil content make it necessary to freeze the product. The distribution of sablefish before and after IFQs were implemented can be seen in the RAM reports. There has not been any significant change in landings to particular ports of call. (NMFS 1999 IFQ Report.)

In summary, it is evident that quality has improved and halibut is now available fresh throughout an 8-month period. Some of the additional values to the fishermen, considering some of the predictions of the SEIS, are $8.2 million in annual average savings in cold storage costs for halibut; $2.5 million of additional annual average ex-vessel value of halibut; and $29 million in added annual average export value of sablefish.

The SEIS discussed savings in gear, food, bait, and fuel costs to the fleet. That analysis estimated annual savings of $1.8 to $2.5 million for food; $3.1 to $4.0 million for fuel; $20.0 to $28.0 million for opportunity cost of labor, and $9.2 to $11.7 million for fixed costs. This statement does not attempt to quantify these actual savings, although they have materialized in all of these categories. These savings and additional values to the fleet have resulted in at least a $75 million net average annual benefit to the industry.

Safety of Fishermen

The SEIS stated:

> An IFQ program is expected to increase vessel safety by reducing substantially the incentive fishermen have to disregard factors that increase the risk of accidents. However, due to a lack of reliable data and methodological problems, it is hard to provide quantitative estimates on the linkages between vessel safety and other factors, such as management practices. (SEIS, page 2–3.)

In the recently released book, *Fishing Vessel Safety, Blueprint for a National Program*, the National Research Council noted that commercial fishing has one of the highest mortality rates of any occupation and that safety has largely gone unregulated. (Page 142.) While attributing a large portion of the safety issues to the vessel (e.g., its structure, equipment, and crew), the authors did consider fishery management practices to be one of three major external influences on vessel safety. (Page 131.) Allocation conflicts have "resulted in a highly competitive operating environment in which fishermen may take unnecessary risks to maintain their livelihood". (Page 132.)

During the open access halibut "derbies" which predated the IFQ program, many people lost their lives. In 1992, during the two-day openings in the Gulf of Alaska, six people died.

In a report from the U.S. Coast Guard, by Captain B.I. Merchant, September 6, 1996, there was comment on the safety record for the first year of the IFQ program. The report focused on the derby years, 1992–1994, and the first IFQ year, 1995. The conclusions were that search and rescue attempts over the 8-month 1995 IFQ season were approximately half the number recorded during the two or three 24-hour seasons for each of the years, 1992, 1993, and 1994. Specifically, there were 15 search and rescue attempts in 1995, compared to 33 in 1994, and 26 in 1993.

The report stated:

> Of note, is the fact that no lives were lost in the four vessel sinkings that occurred during the 1995 IFQ season . . . fishermen have been choosing periods of fair weather to fish. This seems to confirm the premise that the I.F.Q. system provides a framework where each master has the greatest possible control over safety issues. (Page 1—Appendix 13)

In reports completed by Pacific Associates, a highly qualified fisheries consulting organization, search and rescue cases for the derbies from 1991–1993 were logged at 216, or an average of 30 per derby opening. To date, after two and one-half seasons, there has been one death during IFQ operations. Of the 22 vessel losses in 1996, due to fire and sinking in Alaskan waters, only one vessel is identified by the U.S. Coast Guard as an IFQ participant. The 1999 RAM Report states relative to reflecting the following. In addition to its enforcement responsibilities, the Coast Guard also monitors safety at sea, and reports that, during the 1998 IFQ season, there were 11 Search and Rescue (SAR) missions undertaken (fifteen in 1995, seven in 1996, and nine in 1997). There were no sinkings in 1998 (four in 1997, two in 1996, and two in 1997), and two lives lost (none in 1995, two in 1996, and one in 1997). In the 3 years prior to the IFQ fishery, there were an average of 28 SAR

missions, two vessel sinkings, and two lives lost during the short derby seasons. Those deaths that have occurred since the IFQ program began have not been due to heavy weather accidents. Three of the deaths have occurred while the vessels were moored in harbor.

As noted above, due to the high loss of life in commercial fishing activities, the 104th Congress enacted, in section 106(b)(10) of the Sustainable Fisheries Act, National Standard 10, which provides, "Fishery conservation and management measures shall promote the safety of human life at sea." 16 USC 1851(a)(10). Senator Patty Murray stated during the Senate floor debate on S. 39, the Sustainable Fisheries Act:

> . . . This race for fish creates serious safety considerations in many fisheries. Under this race, fishers feel compelled to keep fishing even when the weather or conditions of the vessel or health of the captain or crew would suggest otherwise. Unless fishery management plans provide opportunities and incentives for fishers to sit out storms and return to port for repairs or medical attention, lives will continue to be lost. . . .
>
> For this very reason we included promotion of safety of life at sea in the National Standards of the Magnuson Act. (*Congressional Record*, September 18, 1996 at S10818.)

Economic Stability in the Fixed Gear Halibut and Sablefish Fisheries and Affected Communities

The Commerce Department, in approving the IFQ program, recognized that the open entry fishery for halibut and sablefish had created an extreme excess of capital investment. The Department observed that the excess capital was causing instability and uncertainty in the fishery. The SEIS states, "However, once the adjustments are made, IFQs would decrease uncertainty and increase the ability of fishermen and processors to plan their participation in the halibut fishery." (SEIS, page 2–13.)

> Of the 7,992 different vessel owners who participated in the halibut fishery between 1984 and 1994, 38 percent did so for only 1 year while only 9 percent participated all 7 years. It is estimated that 1,443 vessel owners participated in the fixed gear sablefish fishery between 1985 and 1990. Of these, 45 percent participated in only 1 year and only 6 percent participated all 6 years. (SEIS, page 2–13.)
>
> This is the case in terms of both short and long-term planning. In areas with only a few very short openings, if a vessel breaks down, a fisherman might miss all or a substantial portion of the season. Likewise, increased fishing effort does not allow processors to plan for consistent or orderly processing. The short-term discontinuities make planning difficult. (SEIS, page 2–12.)
>
> A further benefit of quota systems is deemed to be the degree of certainty given to participants upon which to base their investment and fishing decisions. It is argued that if people are aware of the quantity of fish available to them that they will be able to make soundly based decisions about the future. (SEIS, page 2–54.)

The vessel owners are now able to fish and time their operations, not only around bad weather, but also with a view to market opportunity, so they can efficiently operate in other fisheries that may otherwise have been unavailable to them because of brief, fixed season openings. Prior to the IFQ program, thousands of vessels had two, 1-day earning opportunities. Today, earning opportunities, through consolidation, are creating stability within the harvesting sector. Stability has been enhanced by the constraints on quota share concentration, through the use of ownership caps, vessel caps, and vessel classes. These were designed to prevent too great an accumulation of quota share ownership by individuals in the fleet and to ensure processors an adequate number of harvesting vessels. Ownership caps and vessel cap limits are cited in the RAM report. (Pages 15 and 16.)

The SEIS stated that, under the IFQ system, people would be able to make sound business decisions about their future. The system was designed to encourage transfers of quota within certain limits. It was designed to encourage an owner-operated fleet. This was provided by requiring new purchasers of IFQs to be on the vessels when the quota shares were being fished. It is clear that the program is functioning as designed. The owner-operator provision is providing stability for crews and vessel owners who work on deck.

Some members of FVOA have chosen to sell, and others have chosen to purchase, quota shares. The results are that for those who have chosen to purchase, the owners and the crews are earning more. Those who have sold out have received some

compensation for their past investment and efforts. The crews that have been displaced to date are those who were participating in two, 1-day jobs. The SEIS states on this issue, the following, "In considering the employment effects of an IFQ program, it should be remembered, that many fishermen take a break from other fishing or non-fishing activities to participate in the halibut fishery. Therefore, their alternative to participation in the halibut fishery is not unemployment." (SEIS, page 2–10.)

In terms of stability for the local communities, there have been some claims that the IFQ program has adversely affected the ports of Kodiak and Dutch Harbor. The 1997 IPHC Annual Report list by port the halibut landings as follows:

1. Kodiak: 20 percent, 9,103,000.
2. Homer: 12 percent, 5,242,000.
3. Seward: 9 percent, 3,876,000.
4. Dutch Harbor: 6 percent, 2,855,000.
5. Sitka: 6 percent, 2,800,000.

The RAM September 1997 report, page 50, shows that, in 1995 and 1997, the top five halibut ports remained the same as in 1994, and the percentage of landings was similar.

With regard to sablefish, the SEIS did not provide analysis similar to that for halibut, however, in looking at the 1990 data provided in that document, four of the top five districts are still in the top five for landings, when compared to the 1997 September RAM report, page 50.

1. Wrangel, Petersburg: 7,121,000 Lbs., 26 percent.
2. Sitka Borough: 6,131,000 Lbs., 22 percent.
3. Seward Borough: 4,302,000 Lbs., 15 percent.
4. Juneau Borough: 2,481,000 Lbs., 9 percent.
5. Kodiak Island Borough: 2,134,000 Lbs., 8 percent.
6. Aleutian West Borough: not available.

The IFQ program was designed to have a minimal impact on communities, by preventing a massive redistribution of landings. This was accomplished significantly with the 3-year qualification period of 1988, 1989, 1990, where there had to be a landing to qualify for any poundage in one of these years. This helped ensure that quota holders were still active and operating in the same location as was historically the case. Clearly, this has been accomplished as shown by the hard evidence of landing reports. An argument of economic disadvantage to Kodiak or Dutch Harbor based on IFQ poundage being delivered elsewhere, cannot be substantiated.

The instability of these communities is most likely the result of the remaining pulse-type groundfish fisheries. The fishermen in the Kodiak area have three, 3-day pollock openings; Pacific cod has barely a 2-month operation. The landings in Kodiak were down between 1995 and 1996 by 160 million pounds; none of this reduction could be attributed to the IFQ program.

Similarly, landings in Dutch Harbor were reduced by 105 million pounds between 1995 and 1996. The argument that this was due to the IFQ program is similarly insupportable. The 1999 RAM Report, pages 13 & 14, show the same ports in the top 10 as in previous years for halibut and sablefish.

Rural Coastal Community Development of a Small Boat Fishery

The SEIS made the following statements and conclusions regarding rural coastal community development of a small boat fleet:

The Council wished to enhance the opportunities for rural coastal communities to participate in the sablefish and halibut fisheries. It was in pursuit of this objective that the western Alaska community development program was inserted into the preferred alternative. (SEIS, page 55.)

Opportunities for small communities will be enhanced by having portions of total allowable catches set aside. (SEIS, page 55.)

Many of the constraints imposed on transferability have been introduced to preserve a small boat fishery for sablefish and halibut. (SEIS, page 55.)

The community development quota (CDQ) program was specifically set up for western Alaska rural communities. The CDQ halibut quotas for 1997 amounted to 1,884,000 dressed pounds and 639,334 rounds pounds of sablefish. In the halibut regulatory area of 4C, all of the CDQ quota was harvested and landed by the local community and similarly for the participants in area 4E.

The ex-vessel value of CDQ-landed halibut and sablefish for 1997 will be approximately $4,980,000 (Dutch Harbor price for halibut $1.90; sablefish $3.60/dressed). The CDQ halibut and sablefish quotas thus are a significant benefit to the coastal community of western Alaska and the small vessels, which operate out of those communities.

The Gulf of Alaska's small boat fleet vessels, less than 35 feet in length, have a secure position in the fisheries. The Secretary agreed to certain transferability considerations, which placed the poundage earned by initial recipients permanently in the vessel length category operated by the initial recipients. This effectively prevents vessel owners who operate vessels larger than this from purchasing and absorbing quota traditionally landed by the small boat fleet.

The small boat fleet has been additionally enhanced with recent amendments that allow quota share holders operating small vessels to buy quota from larger vessel classes and fish that quota on the smaller vessels. IFQ holders operating larger vessels cannot use smaller vessel class quota on their larger vessels. This new provision gives smaller vessels, which tend to operate close to shore, more purchasing opportunity.

As noted above, the 1996 amendments to the Magnuson-Stevens Act, provided for a government loan program funded, in part, from landing fees of the IFQ participants. 16 U.S.C. 1853(d)(4). Those who can apply for the loan are fishermen with little or no holdings of IFQs. The amount per loan is limited to about 8,000 lbs. of resource, and anyone holding or controlling 50,000 lbs. or more of quota is not eligible for the loans. Congress chose to help out the crews and those fishermen looking for upward mobility in the industry. This program should help rural citizens who have few cash-generating industries.

In summary, owners of small vessels have a guaranteed pool of quota and have the opportunity to gain more than their traditionally allocated share. Rural communities, dependent on smaller vessels, have been given compensating advantages over the communities dependent on larger vessel classes. In addition, the loan program should improve their ability to become an increasingly significant part of the industry. The western rural communities have been provided an allocation to ensure their participation in the adjacent coastal waters.

CONCLUSION

By any rational measure, the halibut/sablefish IFQ program has been a great success. With this example firmly established, individual transferable quotas should be available to fisheries managers nationwide.

STATEMENT OF KAY H. WILLIAMS ON BEHALF OF SAVE AMERICA'S SEAFOOD INDUSTRY COALITION

Madam Chairwoman and members of the Subcommittee, my name is Kay Williams. I am Vice-Chairperson for Save America's Seafood Industry Coalition. We have members in all five Gulf states. On behalf of Save America's Seafood Industry Coalition, I would like to offer the following comments for consideration in reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act.

GULF OF MEXICO RED SNAPPER RESEARCH (SECTION 407)

The research provided for in this section has been completed. This section provides, in Subsection (b) a prohibition, in Subsection (c) that a referendum be conducted by the National Marine Fisheries Service of persons holding commercial red snapper licenses, to determine if a majority support proceeding with an IFQ program and in Subsection (d) makes the recreational red snapper allocation a quota and provides for closure of the fishery when the quota is reached. We support all of section 407. Save America's Seafood Industry supports fair and equitable regulations among all sectors of the Industry. Fishermen should have a say in how to operate their business and IFQ/ITQ are not good for all fisheries. With all of the problems, with the IFQ/ITQ programs that are going on now, we should learn from these mistakes before creating more.

OUR THOUGHTS ON COUNCIL PROCESS/FISHERIES MANAGEMENT

NMFS has become too authoritarian and unresponsive to Councils. NMFS has embarked on a cyber-modeling agenda to the extreme, unsupported by adequate empirical data. NMFS and its subcontractors have been negligent in analyzing and interpreting collected data in a timely fashion. The implementation process has become so laborious and time consuming that management actions become delayed beyond effective timelines. NMFS has misconstrued congressional intent in developing "Guidelines"; for Magnuson-Stevens (SFA).

RECOMMENDATIONS FOR SFA

Final action on any Council approved management action must be in effect for a minimum of 3 years. This would include TACS, quotas, etc., unless overturned by "Emergency Action." All Council actions submitted to the Secretary of Commerce must be implemented within 1 year of their submission. For stocks that are demonstrably improving, no more stringent regulatory actions can be taken without a ¾ majority Council vote, and never unilaterally by NMFS. NMFS science should be based, wherever possible, on current empirical data. Where data gaps exist, these should be given priority as research needs within NMFS.

When NMFS projection models are deployed, they must first be tested in the field and validated in real world ecosystems. Maximum sustainable yields cannot be set at a level beyond the highest historical catch levels of stocks which are deemed overfished. Rebuilding periods of demonstrably improving stocks should be determined equally by socio-economic as well as biological considerations. The " Guidelines" developed by NMFS must be approved by a majority of Councils.

RECOMMENDATIONS FOR RED SNAPPER MANAGEMENT (AS PART OF SFA)

Red snapper should be considered as a special management species, independent of the management regime of other species. This is justified because of:

1. Its complex socio-economic parameters
2. The relationship with and impact on the shrimping industry.
3. The massive changes in available habitat with concurrent changes in population dynamics.
4. The uncertain data base used in developing stock assessments.
5. The disagreement regarding effort data in red snapper harvest.
6. The historical failure of currently used red snapper projection models to correctly predict stock health.
7. The inconsistent history of red snapper management measures.
8. The public distrust of current management practices.

Red snapper management should adopt the following regulations: (4 fish bag limit with a minimum 15-inch size limit with a 6-million pound quota for the recreational sector, and a 14-inch size limit with a 6-million pound quota for the commercial sector) for a minimum of 3 years (through 2002). The red snapper stock is not in trouble. The recreational and commercial sector has harvested their quota earlier and earlier each year. The requested smaller size limit in the commercial sector is necessary because of release mortality rates. During this 3 year or longer period, research priority should be given to alternative measures of management, employing more empirical and less theoretical measures, and based on fishery independent data, to ensure the continued rebuilding of this stock.

USER FEES

We do not support user fees. If you are going to allow user fees, then in order to be fair and equitable, as stated in the national standards, you would need to develop a system that establishes user fees for the recreational sector.

CONFLICT OF INTEREST

State Director's should not be allowed to have a vote on the councils. The states receive funds from the Wallop-Breaux fund which presents a potential conflict of interest. We do feel that they should be allowed to participate in council discussions.

Thank you Madam Chairwoman and members of the Subcommittee for the opportunity to share our opinions on this important legislation which is up for reauthorization.

FISHERMEN'S FINEST, INC.
Seattle, WA, July 27, 1999.

Hon. OLYMPIA J. SNOWE, *Chair,*
Oceans and Fisheries Subcommittee,
Committee on Cimmerce, Science, and Transporation,
Washington, DC.

Re: Oceans and Fisheries Subcommittee Hearing, July 29, 1999 Written Testimony—Magnuson-Stevens Act Reauthorization

Dear SENATOR SNOWE: My company manages four mid-sized head and gut trawl and freezer-longline vessels operating in the fisheries of the North Pacific. Thank

you for inviting our company to submit testimony for the committee to consider as it begins looking at the reauthorization of the Magnuson-Stevens Act.

1. *Congress should not encourage the privatization of the fishery resource by encouraging Individual Fishing Quotas and American Fisheries Act type allocations*. We have long objected to building fences and subdividing fisheries. We have consistently supported approaches such as the North Pacific Council's Moratorium and License Limitation programs over other limited-entry approaches. In accordance with this, we have steadfastly encouraged policymakers not to pursue individual fishing quota (IFQ) provisions which tend to benefit larger more liberally capitalized companies rather than traditional fishing vessel owners.

2. *Congress should rectify the inequities caused by the American Fisheries Act in a manner that does not hand out more special privileges.* In accordance with our conviction that allocating specific fishery resource to individuals, especially on a species by species basis, is harmful to traditional fishing vessel owners and operators, we opposed the pollock management provisions of the American Fisheries Act (AFA).

The American Fisheries Act (AFA) was enacted through a process of negotiations between large factory-trawl and shore-based processing plant interests. The primary effect of the AFA on our company has been to deprive our vessels of access to the critical directed pollock fishery. While our vessels' harvests were similar in size to many catcher vessels', our eligibility to participate in the pollock fishery was based on a comparison to large factory-trawlers, not mid-sized vessels. The "inconsequential" pollock fishery catch of our vessels during the AFA qualification period would have been worth nearly $2M this year.

Our company has been significantly harmed by the denial of access to the pollock resource. Our companies participated in the "Americanization" of the pollock and groundfish fisheries beginning in the 1980's, but due to careful engineering of the AFA landing qualification requirements, our vessels were cut out of the pollock fishery by the AFA.

Currently there are several vessels seeking special relief from Congress for the inequities of the AFA. Rather than grant more special access for the few, we recommend the following approach for addressing the harm caused by the AFA:

1. Allocate a small percentage (e.g.: 4 percent) of the directed pollock quota to fishing vessels not otherwise qualified to fish, and not specifically prohibited from fishing, under the AFA. This provision would not affect the Moratorium or License Limitation programs already approved by the North Pacific Fishery Management Council.

2. Provide that the fishing vessels (catcher vessels and H&G vessels) harvesting this small quota pay the 6/10ths of one cent landing fee on directed pollock. Thus the fishing vessels will not be reaping the benefit of a buyout paid for only by the catcher vessel's named in the AFA.

3. Allow processors from any sector the right to process this open access quota of pollock. This right would address at least some of the concerns of the Fair Fisheries Coalition.

I appreciate the Committee's considering these comments during the reauthorization of the Magnuson-Stevens Act.

Sincerely,

RUDY A. PETERSEN.

PROPOSAL FOR OPEN ACCESS FISHING VESSEL ALLOCATION OF POLLOCK UNDER THE AMERICAN FISHERIES ACT

This proposal is intended to provide compensation to all Moratorium/License Limitation Program qualified fishing vessels which were barred from participating in the directed pollock fishery under the American Fisheries Act (AFA).

1. Modify Sec. 206(b) of the AFA as follows:

". . . the remainder of the pollock total allowable catch . . . shall be allocated as follows:

(1) 48 percent to catcher vessels harvesting pollock for processing by the inshore component;

(2) 38.4 percent to catcher/processors in the offshore component;

(3) 9.6 percent to catcher vessels harvesting pollock for processing by motherships in the offshore component; and

(4) 4.0 percent to fishing vessels (as defined in Chapter 21 of Title 46, United States Code) not eligible to harvest pollock under Sec. 208 and not prohibited from harvesting pollock under Sec. 209."

2. Modify Sec. 207(b)(1) of the AFA as follows:

"(1) shall be six-tenths (0.6) of one cent for each pound round-weight of all pollock harvested from the directed fishing allowance under section 206(b)(1) and (4); and"

SUMMARY

This proposal would provide a small open access quota for fishing vessels (catcher vessels and head & gut vessels) not currently eligible to conduct directed fishing allocations for pollock. These vessels would be required to pay the buyout repayment fee levied on directed pollock harvests.

The burden would be placed on the original AFA entitled sectors proportionately. 4 percent is offered as an example of an equitable allocation. No processing restrictions would be placed on this directed catch.

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