WEST COAST GROUNDFISH AND DUNGENESS CRAB CONSERVATION

HEARINGS

BEFORE THE

SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS

OF THE

COMMITTEE ON RESOURCES
HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTH CONGRESS

SECOND SESSION

ON

WEST COAST GROUNDFISH

AND

H.R. 3498
THE DUNGENESS CRAB CONSERVATION AND MANAGEMENT ACT

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OVERSIGHT HEARING ON WEST COAST GROUNDFISH

THURSDAY, APRIL 30, 1998

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS, COMMITTEE ON RESOURCES, *Washington, DC.*

The Subcommittee met, pursuant to notice, at 11:11 a.m., in room 1324, Longworth House Office Building, Hon. Jim Saxton (chairman of the Subcommittee) presiding.

STATEMENT OF HON. JIM SAXTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. SAXTON. The Subcommittee on Fisheries Conservation, Wildlife and Oceans is meeting today to conduct an oversight hearing on the West Coast groundfish. The main thrust of the hearing is to explore the methodology used by the National Marine Fisheries Service to place new restrictions on harvesting of certain species of groundfish on the West Coast.

As with most issues associated with groundfish, this issue is complicated. Many of these groundfish, which are long-lived species with slow growth rates and a very low ratio of production to biomass, are important to both commercial and recreational sectors. Therefore, it is very important that stock assessments be accurate and timely.

A number of stock assessment methods have been used by the National Marine Fisheries Service to determine the status of specific stocks of groundfish. Historically, the National Marine Fisheries Service has gathered stock assessment data through several methods, including slope surveys, shelf surveys, pot surveys, and long-line surveys. I look forward to hearing from our witnesses about the relative benefits and disadvantages of each survey method, as well as other comments on the fishery.

Now, I will move to the first panel for their opening statements. Mr. Schmitten, why don't you begin, and we appreciate very much your being here this morning, and that goes for the whole panel, of course.

[The prepared statement of Mr. Young follows:]

STATEMENT OF HON. DON YOUNG, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALASKA

Mr. Chairman, thank you for scheduling this hearing on west coast groundfish.

As you are well aware, in December of last year, the National Marine Fisheries Service announced the 1998 harvest levels for 13 species (or species groups) of groundfish that are managed by the Pacific Fishery Management Council. The har-

vest levels for eight of the thirteen species were drastically cut from the 1997 levels—some as much as 60 percent.

While I have always advocated harvest levels that ensure a sustainable harvest, I am concerned by such a drastic reduction. If the stocks were in such bad shape that a harvest reduction was in order, why was it not predicted earlier? Was there a sudden change in ocean conditions that caused a huge decrease in the population in one year's time? If not, then what caused such a sudden, drastic cut in the acceptable harvest level?

This is yet another example of the fishery managers not having enough information on the health and status of the fishery resources to make timely, informed decisions. If we are to maintain sustainable populations of fishery resources, and if we are to maintain a viable fishing industry, we need to provide the fishery managers with adequate information.

We cannot continue to manage from one crisis to another. It certainly doesn't help the fishery resources to have widely varying harvest levels that allow high harvest levels one year and put the fishery in danger of collapsing the next year. It also certainly doesn't help the fishing industry who think they are harvesting at an acceptable level and suddenly find themselves on the beach and looking to the Federal Government for help.

One of the problems with assessing the abundance of west coast groundfish has been that the trawl survey is only done once every three years. It is very difficult for fishery managers to predict trends in the populations without up-to-date information. Two or three year old information may not be adequate.

This Committee, and the Merchant Marine and Fisheries Committee before it, have been asking NOAA to develop a plan for fishery research for at least 7 years. After years of inaction, NOAA finally developed a plan for new fishery research vessels and asked this Congress to appropriate money for design work in fiscal year 1998. We responded positively to that request. Now, however, I find that the Administration's fiscal year 1999 budget submission contains no funds for these essential vessels. This is remarkable and incredibly disappointing.

The problem of inadequate fishery data is not unique to the west coast or the groundfish fishery. This is a problem in almost all of our fisheries. In fact, NOAA admitted how little data they have in the report to Congress on the status of fisheries of the United States. According to this report, we do not know the status of almost two-thirds of the species managed by the Federal Government. How can fishery managers make informed decisions without information?

We need to do something about this. I hope we will hear testimony today that will give NOAA officials some ideas for developing research plans which will give fishery managers better information so that better, more consistent management measures can be implemented.

Thank you, Mr. Chairman.

STATEMENT OF ROLLAND SCHMITTEN, ASSISTANT ADMINISTRATOR FOR FISHERIES, U.S. DEPARTMENT OF COMMERCE; ACCOMPANIED BY RICHARD D. METHOT, JR., DIVISION DIRECTOR, NATIONAL MARINE FISHERIES SERVICE; WILLIAM L. ROBINSON, ASSISTANT REGIONAL ADMINISTRATOR FOR SUSTAINABLE FISHERIES, NORTHWEST REGION, NATIONAL MARINE FISHERIES SERVICE

Mr. SCHMITTEN. Well, thank you very much, and good morning, Mr. Chairman. I'd like to thank you for inviting us to testify on the issue of West Coast groundfish. Just for the record, I am Rollie Schmitten. I'm NOAA's Assistant Administrator of Fisheries, and, as requested by the Committee, I'm accompanied by Mr. William L. Robinson, the Assistant Regional Administrator for Sustainable Fisheries in our Northwest Region and Dr. Richard Methot, the Director of Fisheries Resources, Analysis and Monitoring Division of the Northwest Fisheries Science Center. Mr. Chairman, these will be your experts today, and I will introduce—although I'm sure he will introduce himself—from the Pacific Fishery Management Council, Mr. Phil Anderson, a representative from the State of Washington.

You have our complete testimony, so let me just summarize that very briefly for you. I'd like to begin with my conclusion and recommendation to you and the Subcommittee. Mr. Chairman, my concern for West Coast groundfish comes from the 14 years that I was a State and a West Coast regional fisheries manager. During that time, I had the pleasure to serve on both the Pacific Fisheries Management Council and the North Pacific Management Council, so I have some knowledge of the issues of groundfish on our West Coast, and also the process that was used to manage those fisheries.

Let me note, though, that although the Committee's focus is on West Coast groundfish, my concern from groundfish in the west extends from California to Alaska, and that the major part of the solution remains the same, whether it's for California, Oregon, Washington, or Alaska. That is, given the fact that most of these fisheries are overcapitalized, that the competition for each fish has become very aggressive, that technology often outpaces management and scientific knowledge, that abnormal ocean environmental conditions have existed the past decade, therefore, the accuracy and timeliness of fishery data is imperative to maintain both healthy fisheries and fish stocks.

So the solution is simple. We must move from a triennial to an annual survey basis. And the need for annual surveys applies to Alaska as well as to the lower, or the southern part of the West Coast, so as to assure that the largest and most valuable fisheries in the Nation remain robust and that increased knowledge through the annual surveys in the lower West Coast help restore the confidence in the system.

Mr. Chairman, just for a moment, I'll focus on the process of managing West Coast fisheries. First of all, the term groundfish is an oversimplification for what these people work with. In fact, the Pacific Council's fisheries management plan for groundfish includes 83 diverse species. Currently, the best available information now indicates that some of the stocks are only at 10 to 20 percent of their unfished levels, and that reductions in catch were necessary to allow the rebuilding to safer, more productive levels to occur.

I think the Subcommittee is aware, but, pursuant to Magnuson, NOAA fisheries is responsible for providing the scientific information on which the Councils base their management decisions, and we work very closely with the Council on doing that. What is unusual on the West Coast is that the agency's northwest, southwest, and Alaska science centers all conduct the research that provides the scientific basis for the Council's recommendations on harvest levels.

Mr. Chairman, just to conclude, let me summarize what we've achieved in the past four years, and you can track that by the document, that I believe each Member has.

[The information referred follows:]

Actions Taken by NMFS to Address West Coast Groundfish Decline

Problem Identification:

1993-95 Serious decline of west coast groundfish

Short-term Actions:

1995 NMFS initiates groundfish program at the Northwest Fisheries Science Center's Newport, OR lab with $1.5 million and 7 staff

1995 NMFS commissions external review that identified the lack of survey data as a main problem

1995-present Outreach sessions with fishing industry to explain modeling and stock assessment

1997 NMFS produced new stock assessments for deep-water groundfish species resulting in significantly reduced quotas for some species

1997 NMFS, with U. of WA, developed methods to conduct trawl surveys with local fishing vessels, to be implemented in 1998

1998 NMFS commits $400,000 to continue deep-water slope survey by chartering commercial fishing vessels, augmented by approximately $135,000 of fish value under the "Fish for Research" provisions of the Magnuson-Stevens Act

1998 NMFS commits $750,000 in permanent funding for new scientific staff, timely analyses to improve stock assessment, new projects

1998 In Progress

- Resource Survey Using "Fish for Research"
- Improved Stock Assessment Modeling
- Cooperative Fishery Data Collection Programs
  - Electronic Fish Catch Logbook
  - Port Interview Project
  - Depth Specific Sampling
- Pilot project on trip limit overage retention for science
- Support for the industry-funded buyback proposal

Long-term Actions:

Desire to move to annual surveys using a combination of charter (up to 40%) and the dedication of the first replacement NOAA Fishery Research Vessel to the west coast

Mr. SCHMITTEN. While I was still in Northwest, we began to witness major declines in certain Northwest groundfish stocks. Upon becoming the Director of National Marine Fisheries Service in 1994, I promulgated the need to establish a separate groundfish unit in the Northwest science center, and to no longer rely on the Alaska science center to do the data analysis working up to the stock assessments. It wasn't saying that they couldn't do, and weren't doing, a good job. It was saying that we wanted to establish a separate unit in the West Coast for the West Coast.

In January, 1995, we initiated the Northwest Fisheries Science Center groundfish program at the Newport lab in Oregon, and they began to provide a coordinated stock assessment program which focused on the important and valuable deep-water species in that area. We initiated that program with a one-and-a-half million dollar dedication of funds and a staff of seven people that same year. To make sure of what was needed, we conducted an external review of West Coast groundfish stock assessments, and they identified that the number one weakness was the lack of survey data as a main cause of the problem. That links back to my solution, that we have to get away from relying on three years before we go back in a survey, and move to an annual survey basis.

Many other things have occurred, including providing the funds—$400,000—to take care of the triennial survey, because the NOAA research vessel was about to go into drydock. That was the number one request of industry. Also this year, we added $750,000 in permanent base funding to the Northwest region for the West Coast groundfish management and research, and that was the number two request of the industry. An unusual feature that Congress asked us to consider the Magnuson-Stevens Act, was the use of fish under a new fish-for-research provision, and that will be embraced for the first time in the Nation on the West Coast.

To just close, I want to comment on an issue that we've been working on closely with Senator Wyden. And I want to stress my admiration for his strong support for the West Coast fisheries industry, and to indicate that the National Marine Fisheries Service supports the utilization of trip-limit overages for science, as proposed by Senator Wyden. Not only would it reduce the unnecessary waste, it would also add science that would help provide a better accounting for the overall groundfish quota. And after extensive talks with the industry, with the State, with the Councils, we will propose such a pilot program to the Pacific Fisheries Management Council in June. To further help facilitate such a proposal, I've agreed with Senator Wyden that a way of closely involving the affected industry is that our agency will sponsor a workshop, under the auspices of the Council, to develop a draft pilot program.

Mr. Chairman, I think that shows you that in a short four years, we've developed a program, we've nurtured it, and it now is a first-class science program. It's not without problems yet before it, but I think we've come a long way, and I appreciate this opportunity.

[The prepared statement of Mr. Schmitten may be found at end of hearing.]

Mr. SAXTON. Phil Anderson, go to it. Thank you very much.

STATEMENT OF PHILIP ANDERSON, PACIFIC FISHERY MANAGEMENT COUNCIL

Mr. ANDERSON. Thank you, Mr. Chairman, and good morning, and good morning members of the Committee. My name is Phil Anderson. I represent the Washington Department of Fish and Wildlife on the Pacific Fishery Management Council, and I'm here today to testify on behalf of the Pacific Council. The Council appreciates this opportunity that you've provided us to provide testimony on the management and research needs of the West Coast groundfish fishery.

The Council and the National Marine Fisheries Service manage the groundfish fishery consistent with the Pacific Coast groundfish fishery management plan, which was developed in 1982. The fishery is comprised of three primary sectors, the commercial fishing sector, processing sector, and the recreational fishing sector.

The commercial fishery harvests primarily Dover sole, sable fish, Pacific whiting, and a variety of species of rock fish. The majority of the commercial fisheries to extend landings throughout the year by setting cumulative trip limits per vessel, and adjusting them in season as necessary. The recreational fishery harvests a relatively small portion of the total harvest; however, groundfish does represent an important species for that industry.

Annual management specifications for major species are established each year and are derived from stock assessment. Stock assessments are generally conducted with models which allow the utilization of information obtained from a number of different fishery and resource survey sources. In addition, beginning in 1995, National Marine Fisheries Service has made very significant efforts to improve survey technique. However, given the limited amount of funding available, and the technological difficulties of estimating the biomass of groundfish, survey and assessment results are accompanied by substantial uncertainty and imprecision.

The Council recently implemented a new stock assessment process designed to, first, improve public participation, and increase the level of scientific peer review and to provide greater separation between the science and management. Based on the 1997 stock assessment, the Council recommended very significant reductions in the allowable harvest of a number of the major species that contribute to the commercial fishery for 1998.

The total ex-vessel, or landed value, of the species that were reduced are projected to decline from a level of 59.8 million in 1996 to 41.4 million in 1998. This substantial reduction in revenue will further aggravate the depressed economic conditions in both the fishing and processing sectors, in addition to the overall economies of the coastal communities where they are based. Reasons for the dramatic reductions in biomass from previous assessments are unclear. The results of the 1997 assessments raise a number of questions about the adequacy of the science used to manage the fishery. The industry has been harvesting at levels adopted by the Council, yet significant declines appear to have occurred in many species.

To increase the accuracy of stock assessments, improve management, and provide for a stable fishery, the Council believes the following steps should be taken.

First, National Marine Fisheries Service should increase the frequency and coverage of trawl surveys. The Council also supports cooperative agency and industry research projects, a tool that was recently made available through the reauthorization of the Magnuson-Stevens Fisheries Conservation Fisheries Management Act. In particular, we—I'm sorry, it has the potential to collect needed information at less cost, while providing support to the industry.

Second, we must take a precautionary approach, because even with improved assessments, there will continue to be a wide confidence interval in the biomass estimates. The Council is examining a more conservative harvest policy. Exploitation rates would be reduced as biomass levels decline to address management uncertainty. If approved, this management approach should provide more stable and abundant populations for the future.

Third, we must improve estimates of total fishing mortality. Assume levels of discard are based upon limited and outdated studies. A comprehensive observer program, and alternative ways of collecting this information are being considered by the Council.

Finally, we must reduce the existing harvest capacity. In 1994, the Council, through National Marine Fisheries Service, implemented a license limitation program in an effort to curb the growth in the fishing fleet. However, the capacity still far exceeds the resource available for harvest. Additional measures are necessary to achieve a stable and economically healthy industry. An industry developed and funded trawl permit buy-back program is currently being considered by the Council. Individual quotas are another method of addressing excessive capacity; unfortunately, this tool is not presently available to the Council.

The Council looks forward to working with the fishing and processing sectors, and National Marine Fisheries Service to meet the resource management challenges that lie ahead.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Anderson may be found at end of hearing.]

Mr. SAXTON. Thank you very much. Let me just ask a couple of questions, and then go ahead and turn the rest of the questions over to the other members.

Why have some stock assessment methods been abandoned, such as pot surveys in favor of some others, and are there any types of surveys that are particularly useful to fisheries managers that should be continued or increased? Dr. Methot?

Mr. SCHMITTEN. Dr. Methot?

Dr. METHOT. Thank you, Mr. Chairman. The survey methods that are used on the West Coast have included a number of different techniques. The discontinuation of the pot survey that had been done for sablefish through 1991 was partly based upon the number of resources available to conduct overall surveys, and also due to some technical limitations of conducting that particular pot survey.

The emphasis since then has been on a multi-species trawl survey. The multi-species aspect of the trawl survey provides us information not just on the sablefish, but also the thornyhead species which are growing in importance, and Dover sole as well. The opportunity to expand our survey efforts to once again include a sur-

vey that would be targeted on sablefish, such as a pot survey or a long-line survey, is an opportunity that we are very interested in exploring, as we have greater opportunity to expand our resource survey capabilities.

Mr. SAXTON. You mentioned the trawl survey, which my understanding, you have historically done that every three years. Is that correct?

Dr. METHOT. There are two trawl surveys that are conducted upon the West Coast, and they're independent efforts. One is a triennial survey, every third year, beginning in 1977. And it's a survey that has been targeted upon primarily the rock fish and other species that are upon on to the shallower waters of the continental shelf. Again, that survey's gone on every third year, since 1977, again in 1998.

The other survey has been conducted annually since 1988, and it's a survey that's directed more to the deep-water species. It uses a slightly different trawl, and it's a survey that's been conducted by the NOAA vessel MILLER FREEMAN, whereas the triennial survey has been conducted aboard two chartered trawl fishing vessels, as well as university vessels.

So these two surveys, together, give us some coverage of the diversity of groundfish species, but even these two trawl surveys do not cover all of the various species of groundfish that we have under our jurisdiction.

Mr. SAXTON. Let me just ask, with regard to the trawl survey, understand that the NMFS vessel that conducts, or that you use to do the trawl surveys, is going to be taken out of service, at least temporarily. Is that correct?

Mr. SCHMITTEN. Mr. Chairman, this is one that I've been very directly involved in. Yes, for the leg of the triennial survey that it was going to conduct, it will be laid up in the drydock. I think this vessel is 32 years old. Industry was extremely concerned, because that could mean, instead of a 3-year, there could be a 5-year lapse. They sought for some funding relief. I have guaranteed that the $400,000 that is necessary to conduct that survey is committed, and that we will contract with the private sector to get the job done. That was their number-one request of us.

Mr. SAXTON. Will the methodology and the results of the methodology done by NMFS that you will do through private contracts be compatible with the results of the surveys that you did?

Mr. SCHMITTEN. It certainly is our intent, and that was part of the reason that we contracted with the University of Washington to develop the protocols for allowing and working closer with the private sector to conduct some of the survey work. I ultimately envision both the private sector doing up to 40 percent of the surveys, and NOAA conducting the balance, but in partnership. And I think by doing that, you gain much more believability and reliance, or support of industry.

Mr. SAXTON. I wonder if you would all mind if I do something unusual. Senator Wyden has come in, and he was to be our first panelist. Senator Wyden, we're going to go vote, and I don't want to make you wait until we get back, so maybe if—Rollie, would you mind letting the Senator take your seat?

Mr. SCHMITTEN. Yes, sir.

Mr. SAXTON. And we'll hear Senator Wyden's testimony, and then we'll come back to you as soon as the vote has been completed.

You may proceed. We're going to leave here in approximately 10 minutes for our vote, so take your time, but if you could finish up within 10 minutes.

STATEMENT OF HON. RON WYDEN, A SENATOR IN CONGRESS FROM THE STATE OF OREGON

Senator WYDEN. Mr. Chairman, thank you very much for your thoughtfulness, and going back to the days when I was a member of this body, I've enjoyed working with you, and I want to thank you for your graciousness again. And I see old friends Congressman Farr, and Wayne, and really appreciate your coming. I would ask unanimous consent that my full statement could be made a part of the record, and perhaps just touch for a minute or two on a couple of key points.

Mr. SAXTON. Without objection.

Senator WYDEN. Thank you, Mr. Chairman. And I just come today to say that I think the National Marine Fisheries Service has worked in a very positive and constructive way with those of us in Oregon who are trying to deal with this groundfish crisis. And it is truly, you know, a crisis.

Terry Garcia came at my request to the south coast, met with fishing families, met with a cross-section of industry leaders, and they are just devastated with these reductions in the allowable catch. And he vowed then to say that he was going to be able to come back and show that we're making some changes. And in fact, he has brought with the proposal that Mr. Schmitten's talking about today something that I think is very, very constructive. In effect, what they are proposing to do is to use the next few months to work with fishing families, with the fishing communities, to devise a new approach that would allow for the first time overage, you know, fishing in excess of the allowable limits to be sold when it gets to shore, used and overseen by a public entity, to start looking at ways to avoid this problem in the first place, and so that we can get better stock assessments. Perhaps hire some of those fishers that are out of work as observers. Look at issues relating to gear and how it's used.

And what they envisage is essentially what we have been talking to them about over the last few months, since Terry Garcia came to the Oregon coast. And the most appealing part of it to me is something Congressman Gilchrest and I always used to talk about when we'd talk about these kinds of issues. It is that this would not be a top-down, run-from-Washington, DC exercise. We've decided that this would be something that would be voluntarily. Fishing families could choose to be part of this if they wanted to, and in the next few months, essentially you would, through some workshops and other sessions on the coast, allow for fishing families to essentially design this over the next few months, use it through our regional organization.

So I'm very hopeful that we can go forward on this. The industry is in support of this. We've talked to a lot of people in the commu-

nities; they're for it. Conservationists like the idea of using this as a chance to test out some new approaches.

My view is, Mr. Chairman, and I'll really wrap up with this last point, that this could be a national model. This could be a national model where we could really study how to deal with this overage question, how to make sure that we make better use of the resource, and the most appealing part of it is, it wouldn't be run from the Beltway. It'd be run from the region, we'd involve the families, come back with good data on the kind of key elements so you and others could take a look at it, and perhaps be duplicated elsewhere.

So, I really appreciate the chance to come, particularly to go out of order. I remember so well having to chase across the street and make a vote, so I really appreciate the chance to give just a couple of minutes of input this way.

Mr. SAXTON. Well, Senator, thank you very much. Your testimony is very articulate and we appreciate very much hearing from you on this issue. I can tell from your testimony how closely you're working with the local folks, as well as with the regulators, Rollie and others. And so we really appreciate the degree of enthusiasm with which you have approached this issue.

Mr. Farr, do you have any questions at this? But I'd just like to thank you for being here. Mr. Farr, do you have any questions?

Mr. FARR. I'll save my questions till after we get back from the vote, but I do want to thank the Senator for coming over here. It's nice to see you here, we miss you in this House, we appreciate your leadership in the Senate, and we hope the Senate will be as user-friendly for our requests as we are for yours.

Senator WYDEN. You have reciprocity under all circumstances, and suffice it to say this Committee, you all are really the experts on this issue. I've learned a lot about groundfish in the last few months, and we're going to be working real closely with you.

Mr. SAXTON. Mr. Gilchrest.

Mr. GILCHREST. I just want to say, Ron, it's good to have you back here. We really look forward to working with you on this and many other issues, especially how we, the human species, are trying to figure out the complexity of the fluctuations in other species, especially this groundfish problem. But working with the community to set up and anticipate problems so they're not so dramatic or drastic is a wise idea. Good to see you again, Ron.

Senator WYDEN. You're being too logical, as always, and that's the heart of it, it's preventive strategy.

Mr. SAXTON. Well, thank you very much, Senator. And we're going to take a little break here now so that we can run across the street, as the Senator said, and vote, and when we come back, it will be Mr. Farr's turn to question, and Mr. Schmitten, you can resume your seat there when we get back. Thank you very much.

Senator WYDEN. Thank you, Mr. Chairman.

[The prepared statement of Hon. Wyden follows:]

STATEMENT OF HON. RON WYDEN, A SENATOR IN CONGRESS FROM THE STATE OF OREGON

Mr. Chairman, if ever there was an issue which called for innovation and new ideas, fishery management is it. Everyone agrees that something needs to be done to keep fish stocks from disappearing and keep our fishing communities vital, but nothing has ever seemed to work.

All along my state's magnificent coastline, from Newport to Astoria, fishing communities are at a moment of serious peril. The groundfish stocks on which they depend may have shrunk to dangerously low levels. And the government, in trying to protect that resource, has placed limits on allowable groundfish catch which jeopardize livelihoods and threaten entire communities. At the end of last year the Pacific Fishery Management Council approved harvest guidelines which called for a huge cut in the 1998 allowable catch of many groundfish species. The cuts were made based on scientific stock assessments, but the data underlying those assessments are extremely limited. The Council said it had no choice under the law but to reduce fishing.

Oregonians want to manage the groundfish resource wisely. The fishing industry is an integral part of the culture of Oregon's coastal communities as well as a major contributor to the economy. In Lincoln County, for example, the fishing industry provides around $61 million each year to the local economy and 20 percent of the total wages earned.

Unfortunately, the measures being taken to protect fish stocks have had a devastating effect on Oregon's seafood community. The reduction in allowable catch, which for some species is as high as 65 percent, will result in a 23 percent decrease in all groundfish-derived contributions to Oregon's economy. This translates into a $14 million loss of personal income or the equivalent of about 678 jobs in Oregon. The cuts will have a disastrous economic ripple effect in coastal communities—from boat crew members and processing plant workers, to boat and plant owners, to marine hardware suppliers, to port businesses.

Most disturbing to me is the fact that the severely reduced harvest guidelines are based on inadequate data. As you know, harvest guidelines are determined by stock assessments, which, in turn, are dependent on the data collected in surveys. Data used to make stock assessments on the West Coast are considered to be inadequate by scientists, fishermen, fishery managers, and environmentalists. Without better data and analysis, stock assessments and harvest guidelines will be subject to skepticism—especially during these times of low harvest levels.

Some of your witnesses may suggest ways to improve the collection and analysis of data. I would like to highlight two ideas: chartered surveys and retention of overages.

It is crucial that the National Marine Fisheries Service (NMFS) perform *annual* surveys of grouch stocks so that fishery management decisions are based on the best data. The Northwest does not have a dedicated research vessel to perform this important work, so surveys have traditionally been performed *only every three years.* In place of a dedicated research vessel, NMFS is starting to follow the industry's suggestion to charter private vessels to collect data. NMFS should expand the use of these collaborative surveys—the more experience the agency has in conducting these surveys, the more effective the resulting data.

Chartered surveys can be paid for by "fish for research"—a concept that allows fishermen to keep the fish caught during chartered surveys as a means of partial payment for the survey. I am encouraged by NMFS's indication that they will be trying out "fish for research" this year. This program can potentially create a mechanism to finance the collection of data giving NMFS more data at less cost to the taxpayer.

The other program I would like to highlight is a "retention of overages" plan, which would utilize some of the fish that fishermen are forced by regulations to discard. This idea has been raised by the industry several times in the past. The objectives of a retention of overages plan are to reduce the waste of fish and to increase and improve groundfish data.

Overages are marketable fish caught in excess of trip limits. Fishermen are fined if they bring overages to port, so they throw the fish overboard. Most of these fish die. This is a terrible waste, especially considering the current crisis. Fishermen have told me that they are angry they are forced to throw "beautiful" fish overboard to die. I suggest that we utilize these fish and work towards increasing our understanding of the fishery so that we can better manage it.

A retention plan would allow fishermen to keep their overages without being fined. A fisherman would bring his catch to port and sell the amount of his trip limit. The overages would be surrendered to a public entity. The entity would sell the fish to the local processor, take the funds and grant them for specific purposes, such as scientific research or community assistance.

I suggest this idea be implemented as pilot project for the remainder of this year. A working group made up of NMFS and industry folks could meet to discuss implementation procedures as well as come up with innovative ideas for using the funds. If this group is established quickly, it could report to the Pacific Fishery Management Council at the Council's next meeting this summer.

At the end of the year, the working group could reconvene to evaluate the effects and make recommendations on the possibility of a year-long plan for 1999. The objective of a more extensive plan should be to provide the data needed to eventually reduce overages and discards in general. Currently, fishery managers estimate the level of discards and these estimates play a role in determining harvest guidelines. A more extensive retention plan could even help fund an observer program to provide accurate data regarding total catch thereby reducing the level of uncertainty involved in setting harvest levels.

I'd like to be clear in saying that I don't think a retention of overages plan should be permanent. I don't want a plan to legitimize or institutionalize overages and discards. Rather, I'd like the plan to provide the scientific basis from which fishery managers can work to effectively reduce discards.

What I'm advocating here today is implementation of a pilot plan *for only this year,* so that we can get an idea of how well this idea will work. Afterwards, if appropriate, we can discuss a longer term plan.

I realize that many people have strong feelings regarding the management of groundfish. But we are in a crisis situation. We need to get past the finger pointing stage and start working on solutions. I have been working closely with Terry Garcia, the Deputy Administrator of NOAA, on West Coast fisheries issues. Terry is a breath of fresh air. Recently, he traveled with me to the Oregon Coast to attend two public meetings to discuss groundfish issues. We both left those meetings deeply impressed by the urgent needs of the fishing community. There are critical needs which must be addressed on the West Coast and I think Terry understands them. My suggestions are the result of our meetings on the Oregon Coast.

In closing, I would like to say that as we discuss groundfish management practices, we should remember that the livelihoods of people are directly linked to management decisions. Let's not forget the fishermen, the processors, and all the other people linked to the seafood industry.

Mr. Chairman, I thank you for calling attention to an issue of such importance to Oregonians and to all citizens of the West Coast. I would ask that my prepared statement be printed in the hearing record.

[Recess.]

Mr. SAXTON. If the witnesses would be so kind as to get in their places and take their seats. When we left, we had just concluded with Senator Wyden, and thank you very much for understanding and for permitting the Senator to intervene in this panel. And we were just about to move to Mr. Farr for his questions.

Mr. FARR. Well, thank you, Mr. Chairman. I really appreciate you having this hearing. As you recall, Congressman Miller and myself asked you, an East Coaster, to hold a hearing on the Pacific Coast fisheries, and I really appreciate it. And it's also good to have you back from last week when you were ill, when we were doing a mark-up of the Oceans Act.

Let me just paraphrase some of my concerns. I'm sort of frustrated. I'm a public official. I'm elected, and I'm appointed to this Committee. The Committee is the Resources Committee. And we essentially have—the major responsibilities are our mining Subcommittee, and those are all the mining resources, oil and gas, and other mineral deposits. We have a water Subcommittee which is just meeting down the hall. They essentially have the whole issue of water and, you know, how much is it and where is it going to go, and so much so that we have a lot of money invested in futures of water and saline-making water contracts and so on. And we have a fisheries Committee. And it seems that it would mean that, of all the resources that we have out there, this is the one that we know the least about.

Why—and as a public official, I mean, I'm sitting here thinking, is this going to be—is fisheries sort of an S and L scandal, that it's where the regulators aren't really regulating very well. Is it that we don't know where we're headed, or is this something where

we're overreacting and we're having people sit at home on shore, where there really isn't a problem? And see, we're caught between the two. Because we represent the constituents who are the commercial fishermen, and we represent the public who owns the resources, all the fish stock out there. And I don't want to lose it.

I represent an area where I grew up with a catastrophic loss of the fishery, and a lot of people don't realize what happened. They know more about the northeast fisheries than they recall of Monterey, which used to be the largest sardine port in the world and we lost the sardines. And the entire place closed. And it was just one city and, you know, there wasn't the kind of programs that we have now on disaster relief and so on. So here's the city of Monterey, just for almost 20 years, the Cannery Row just sat there. And now it's obviously a thriving tourist venture, but what was lost in that 20 years was just incredible productivity of people and lives.

So, here we are. We're sitting here talking about what we know is to be a problem on the Pacific Coast. We have created a management Council. But why—and the management Council is, I think, it's a good—it's a combination of private and public sector and science. Why are we so weak on the science? Why don't we know more about this, and what we know, why aren't we better regulating it? Why are we here worried about depleting a fishery?

Mr. SCHMITTEN. Mr. Farr, let me start with that. First, let me personally thank you for your interest, even if it's concern I know it's honest concern for the resource, and for asking for this hearing.

Why we know so little, frankly, it goes to my solution, and that is I think we need to move from triennial surveys, which at one time was thought adequate. We do have a data base that goes back into the mid-1970's, but for today's demands on these resources, the uncertainties with the environment, the issues that I raised with the overcapitalization, we can't afford to rely on what was good for the 1970's and 1980's. We need annual information. We need it every year if we're going to have support of the industry for our data.

Mr. FARR. Well, why haven't we had that? That's the question—I mean, is there anything broken in the law that doesn't allow you to do your job?

Mr. SCHMITTEN. Oh, absolutely not. Why we haven't had it is we haven't been able to afford it.

Mr. FARR. So we haven't had enough money?

Mr. SCHMITTEN. Let me just tell you. Last year, we lost five million dollars out of the resource information line which supports annual stock assessments. A portion, in fact a big portion, of that was going to go to the West Coast. We have identified now, since I have been here, the needs on the West Coast. I have taken money away from all parts of the Nation to continue to fund and buildup this program, and we've done that to the tune now of about three million dollars. But we do need help.

Mr. FARR. Well, have we—this is a very frank discussion here—have we done what we need to do to really understand how much money we're going to need to solve the problem? I mean, if we put this on a crisis level, if it is a crisis, Congress loves to respond to crises. That's what we do, in fact, we usually don't respond until it gets there. And if there's a crisis in this, and it's just a matter

of inadequate resources, with a concentrated effort and leadership by the administration, we can do that. I mean, you've asked for $750,000 to supplement the inadequate research funds available for ground fisheries for this year. Is that going to be a request next year and the year after, and the year after that?

Mr. SCHMITTEN. Yes. That's in permanent funds that will be in perpetuity. I think we know what we need to do, and thanks to the industry, thanks to the Council, we have developed a plan. We need to go to annual surveys. We need to use the industry in conducting a lot of those surveys. This will provide the data that we need, and we're preparing for that. And that's forecasted in future budgets.

Mr. FARR. But if we don't have enough, OK, it's money for scientific data. But the annual surveys, that's a money issue, not a legal issue.

Mr. SCHMITTEN. Yes.

Mr. FARR. In the meantime, when something's threatened, are you really using enough of your authorized controls, enforcement—is the enforcement adequate?

Mr. SCHMITTEN. First, are we using authorized resources, including enforcement and dollars. I've pledged the $400,000 that the industry asked to do the survey. I've pledged the $750,000, taken it from all parts of the country, to continue the stock assessments in perpetuity. We've engaged in the enforcement side of this. We're willing to use fish for research, as well as support Senator Wyden's concept of avoiding waste in trip overages.

We're trying to be just as aggressive and proactive as we possibly can.

Mr. FARR. There's one ingredient here that's affected this fishery, which is technology. The fisherman have available to them some of the same technology that our military has in being able to discover why the biomass is with the temperature of satellite data and biomass. I mean, they used to go in search of fisheries. Now they don't leave the port until they know where they are and they sell the fish, you know, before the nets are even dropped in the water because they know they're going to catch them. And they catch more than they've ever caught.

So you have fewer boats, but they're catching a hell of a lot more fish. That's all technology that they have, and a lot of that's public given technology, satellite information and so on. Knowing that they're capable of doing that, do you think that you're doing enough in the enforcement area?

Mr. SCHMITTEN. We're at the point where I should turn over to the experts in the field.

Mr. ROBINSON. Congressman, I think one of the situations that we find ourselves in is the level of certainty that we get from what the science is telling us. At one time, when the fish stocks were not under environmental stress, when the biomasses were larger and when the capitalization and technology were not so great, the level of uncertainty in the scientific answers was tolerable.

Times have changed. We have had an environment for the last decade that there's some indication that it is telling us that what we thought were sustainable levels of harvest a decade ago are

probably not sustainable levels of harvest. They're probably something less than that, given the environment.

Mr. FARR. And have you taken appropriate adjustments in enforcement?

Mr. ROBINSON. Yes, the appropriate adjustments are taken through a precautionary approach, a conservative approach that the Council must take in setting the harvest quotas. When you don't have these stress factors, you can live with the uncertainty and you can live with setting quotas that are in a less cautious environment. When you have all of these factors combining to put both biological stress and technological stress and overcapitalization stress, the need for precision is much greater than it has been in the past. That's what we're struggling with. How to make the science more precise so that we know that when the Council chooses a harvest quota, that in fact it is a safe quota. That is the charge of the Council in terms of exercising its stewardship.

What we're struggling with is improving the precision. The program that we began in 1995 at the Newport lab, and the additional supplementation of that program in 1998 is designed to reduce the uncertainty, so that the Council can be assured that the decisions that it makes are truly precautionary and truly conservative, and result in sustainable harvest levels for the future.

Mr. FARR. Mr. Chairman, if I may, I know that there's only the two of us so, the other question I have, and I know Mr. Anderson wanted to respond, but just explain to me why your Council does not manage the squid fishery.

Mr. ANDERSON. We are in the process of developing a coastal pelagic species management plan. Primarily, the squid fishery is taking place off the coast of California and has been managed by California Department of Fish and Game.

Mr. FARR. So it hasn't been managed? There's no regulation, no season, there's no—there's hours of fishing, but not limits to fishing. Not days or——

Mr. ANDERSON. Once again, we are just in the process of developing a coastal pelagic species management plan, and one of the species that would be managed under that plan is squid.

Mr. FARR. What's it take to get a fishery under the management Council?

Mr. ANDERSON. We have to develop a management plan that complies with the requirements under Magnuson, and we have been developing the fishery management plan in this case for coastal pelagics. Actually, it's been in development since 1990, and so it's been a very long and difficult process. We had a coastal pelagic species management plan developed and actually submitted to National Marine Fisheries Service, I believe, in 1994. And it was not approved by National Marine Fisheries Service, and so we've gone back to the drawing table essentially and have developed another plan, and we are in the final stages of development of that plan, and will be submitting it to National Marine Fisheries Service later this year.

Mr. FARR. Are we coordinating as much as we should be with the States? My frustration, coming from the State legislature, all I heard about in the State legislature were fisheries that the State managed, which mostly was salmon and swordfish. And then we

got into a problem with taking of sea urchins and mussels, and sort of the bivalves—abalone. And then I came here to Congress and I understand that we manage a whole—they're all in the same place, so why do we have two different governments managing them? Why don't we meld together what States are trying to do and the feds are trying to do, and have less duplication and more collaboration?

Mr. ANDERSON. I think we've tried very hard to avoid duplication, frankly. I think in the case—the Council has been selective in the species complexes that it's developed management plans for, and we've prioritized those that have migratory ranges to cross State borders. We've prioritized species that predominantly reside outside three miles, in the Federal waters, and have relied principally on the States to manage fisheries which are located primarily in State waters.

Mr. FARR. Let me ask this question: What was the basis for the Council's decision to ignore the recommended quota cuts for sable fish and short spine thornyheads?

Mr. ANDERSON. Relative to sable fish, I do not believe that we ignored the scientific information that we received. On sable fish, the stock assessment models that were used to bring the information forward ranged in a recommendation for a harvest guideline from approximately 2,500 tons up to 7,500 tons. There were five different pieces of information that were utilized in those models, and depending on what combination of those five pieces of information, you got a different result and a different recommendation for a harvest guideline. And I believe in our decision on sable fish, we used the best information that we received from the scientific community in recommending the 5,200 metric tons for a harvest guideline and allowable biological catch for this year.

Mr. FARR. And what happens if that's not adequate? I mean, you've already heard that they're approaching overfished condition last year, so now you have this new harvest guideline, and you'll have new information. What will you do then if they're still approaching being overfished?

Mr. ANDERSON. First of all, I don't believe the number that the Council recommended to National Marine Fisheries on sable fish approached the overfishing definition. I believe that the model, and the parameters of the model, that we utilized in setting the ABC was consistent with an F–35 approach to managing sable fish.

The short spine thornyhead issue is a different issue, and it was a different set of circumstances. And, with your permission, I'd like to ask Mr. Robinson to speak to that issue. And I would also ask that you allow me to come back and respond to some of your earlier comments if I could, please.

Mr. FARR. Certainly. It's the chairman's charge.

Mr. ROBINSON. Congressman, just to elaborate on Mr. Anderson's answer a small bit. The Council was faced with taking a precautionary approach to setting the harvest quotas in the face of substantial uncertainty, which the scientific side of the Council was really unable to advise the Council on in terms of how to best evaluate that uncertainty. There was a lack of risk-assessment information that left the Council trying to figure out essentially what the best conservative approach was. The Council's response was to

reduce the sablefish quota by almost half. It took what I believe to be a fairly big cut out of the quota, and a fairly conservative approach.

I guess one of the reasons we're here today—and the outcome of what we're talking about—will tell us whether that was a big enough cut or not, and where we need to go in the future. Fortunately, the harvest rates that we apply to these stocks are not so great that we're going to put them in any short-term danger. That's not going to happen. Most likely, with additional surveys, with additional stock assessments, we will gain more confidence in the numbers and more confident that we're taking an appropriately conservative approach upon the species. But we're not going to know for sure whether we're conservative enough, or not conservative enough, until we get more surveys and better information.

Mr. FARR. OK. I don't think any of us——

Mr. SAXTON. Last question.

Mr. FARR. In this room—thank you, Mr. Chairman—any of us in this room want, on our watch, to lose a fish stock. I mean, that's total failure in a modern society with the information we have. So whatever resources you need, the public wouldn't tolerate this if it was in so many other areas. You know, the ocean we still don't know enough about. But we stand ready. I'm here to help you. But I think you've got to use us more, us in Congress. Mr. Chairman.

Mr. SAXTON. Thank you very much, Mr. Farr. Let me just ask a couple of questions and make a few comments, if I may. With regard to the funds that you need for research, in particular research vessels, my memory tells me that in fiscal year 1998, we authorized and appropriated, I think it was two-and-a-half million dollars for the design of six new research vessels. And I believe we did so with the understanding that we would then move forward with the administration's request in 1999 and see their request for money for construction of those vessels. We gave you the two-and-a-half million in 1998, and when your request came through for NOAA funding in 1999, there was no request for construction. Can you tell us why that is?

Mr. SCHMITTEN. Mr. Chairman, since I've been the director, I've been encouraging and supporting the need for replacement vessels, even though we would reduce the overall number of nine down to six, and augment with more industry involvement. This is a good news/bad news story. Finally, the administration has agreed, and they've indicated that starting in 2000—I wanted 1999, and certainly supported that, but starting in 2000—they put approximately $160 million for vessels to be constructed in 2000, 2001, 2002, out to 20003. The very first research vessel constructed in this Nation will go to the West Coast.

Mr. SAXTON. What?

[Laughter.]

Mr. SCHMITTEN. Yes, sir. It will be dedicated to this problem, and it will solve both Alaska and the West Coast issues, in that it will provide annual surveys in the entire West Coast. The East Coast enjoys those, Mr. Chairman, for the most part. That's why I say we should start where the problem is. That first vessel will go to the West Coast.

Mr. SAXTON. Now, if you request funding for these vessels beginning in the year 2000, when will Mr. Farr be able to see this vessel steaming off shore and doing research off the California coast?

Mr. SCHMITTEN. I believe it's a two-year construction, so in two to three years he will have his vessel. In between there, we will continue to augment the needed surveys between that period of time so we don't get behind on gathering the data.

Mr. SAXTON. OK. In regard to Mr. Farr's general question about why we know so little about fisheries, I've had those thoughts myself. In fact, last night, Mr. Farr and I shared a podium before a conservation group, and I think we both addressed that question without knowing the other was going to, and I'm not sure that we have an answer. But this situation is a good example of more evidence that we really don't know much about, or enough about, what we're doing.

In 1997, for example, you came here and indicated that you thought the groundfish fishery that we're dealing with today was healthy. And in 1998, you indicated through the process that there ought to be a 60 percent reduction in the take in the fishery. How do you explain what you thought in 1997 was so incorrect as related to your position in 1998?

Dr. METHOT. The situation we have with groundfish is mixed, because of the great diversity of species we're dealing with. We certainly have some healthy species in the groundfish complex, and we have some that now appear to be at much lower levels than we would desire them to be. The combination of this mix of species, as we accumulate more information to better track the exact status of species, has begun to tip us more into the realization that there are a number of species that have declined to a greater degree than we had anticipated might occur. And the combination of these species over the last few years has begun to make us realize that we need to pay greater attention to the entire groundfish complex to be certain that we do have a good fix on just where they're at, and what is the long-term potential for these resources. This situation of unanticipated declines has grown on us over the last four to five years, as we look more closely at a number of species.

Mr. ANDERSON. Mr. Chairman? May also say something to that question?

Mr. SAXTON. Sure, please.

Mr. ANDERSON. Thank you. I'd urge us not to underestimate the difficulty of assessing the biomass and the populations of these species. We're talking about 83 species that live anywhere from 300 to 2,000-plus feet below the surface of the water, that we never see. And most of them are intermixed with one another. Some of them are transboundary in nature—yellowtail rockfish, ling cod, Pacific whiting—migrate north into Canadian waters and are harvested there.

This is a very, very complex problem of assessing precisely, with any degree of accuracy, the total numbers of fish, and thereby extrapolating an acceptable amount that may be removed through harvest. It's in its infancy, in my opinion. Remember, we've been doing surveys every three years, and we started in 1977. Haven't been working at this very long, and as I indicated in my testimony, National Marine Fisheries Service has taken some extraordinary

efforts in recent years to improve their survey techniques. And I think that's going to pay dividends to us as we move through the next years, and we go to an annual survey.

But this is a very difficult group of fish to manage, and assess the total abundance, and determine what—they're long-lived. They sometimes go decades between years when you have good recruitment of new fish into a population. You've got some extraordinary exception—I hope they're exceptional—ocean conditions on the West Coast in terms of low productivity, low upwellings, warm water, exceptionally warm water, much more frequently in the last decade than in previous decades.

And so all of those dynamics play into the difficulty of coming up with biomass estimates to determine annual harvest levels that are acceptable and that will maintain healthy populations into the future. Believe me, we are as frustrated as you are.

Relative to sable fish, we had been managing along at about a 7,800-ton level for seven or eight years. And then, all of a sudden, we get an assessment that tells us that's it's somewhere between 2,500 and 7,800 tons. We go, what's going on here? This kind of change simply couldn't have happened in this short a period of time. And that was the difficulty in struggling with setting a sable fish allocation that took a precautionary approach in making sure that we didn't overharvest that particular species.

Mr. SAXTON. Let me try to make something clear, and I think I can speak for Mr. Farr and I both with regard to this, and if I don't, Mr. Farr can break in and correct me. But we oftentimes, I fear, give the impression that we don't trust what you, as individuals, are doing. And that is a notion that we don't mean to convey. Our queries are more in trying to find out what it is that the system needs that it doesn't have, both in terms of resources and process. And I think that we would both, from our observations, come to the conclusion that resources are not sufficient, and that process may need some fine-tuning, or maybe some big changes.

I've had this conversation with Rollie Schmitten on numerous occasions. Sometimes we've been quiet about it, and sometimes we've been rather noisy about it. But it is frustrating, and I know the people that serve on the New England Council, I know the people that serve on the Mid-Atlantic Council. I know that Mr. Young knows the people that serve on your Council. I deal with the people in NMFS all the time, and I don't think I can identify a person who's not there for all the right reasons.

And yet, the situation that we're hear discussing today, unfortunately, is more common than it is unusual. And so we are hopeful that our well-intended efforts can somehow dovetail with your well-intended efforts to get the proper funding to do the kind of research that we need to do, and to improve the process. That's what we're striving to do. And I thank Rollie, who was in my office last week, I guess it was, and we were talking about making some changes in process that sprung from my urging and his creative thinking. And hopefully we'll be able to move forward with some of those, which may or may not require legislative changes. Hopefully not, because it's a lot easier on everybody if we don't have to do it that way.

So, anyway, I just wanted to say that in conclusion, Mr. Farr, unless you have something that can take a minute or two, I think we'll move on to the next panel.

Mr. FARR. Yes, go on to the next panel. You know, it's interesting, in the offshore oil and gas, we require the oil companies to tell us where the oil and gas deposits are, and then they file with us interest in offshore oil development. And then we tell them where they can drill, what the conditions are that they can drill, and for how long they can drill. I mean, that's a public resource owned by the Federal Government offshore. Why don't we do the same thing for fisheries? It's essentially a question of putting the burden on the private sector, and saying you tell us how much fishery is out there and we'll tell you how much you can take. Rather than putting the burden on the public sector to say, we'll tell you—you just keep fishing until we tell you when to stop.

Mr. SCHMITTEN. Mr. Chairman, I've often raised the very same issue. It's the only natural resource that I can think of—water, you require fees; grazing rights, you require fees; and timber permits, you require fees. The fees usually go into the management of those resources. This is the one anomaly. Why, it's constructed in the tenets of Magnuson-Stevens, and I think that we should allow fees to help with the management. The Administration actually proposed that this year, and hasn't gotten very far. I agree, part of the problem there is that we need to work it out with the industry. Ultimately I view that someday there will be fees that help support the management, and allow the permits.

Mr. SAXTON. Thank you very much for your comments, and the information you have brought to us this morning, and for the time and forbearance that you have demonstrated in being here with us this morning. Thank you.

I'd now like to introduce our second panel. We have Dr. David Sampson of Oregon State University; Mr. Gerald Gunnari of the Coos Bay Trawlers Association; Ms. Karen Garrison of the Natural Rsources Defense Council, and Rod Moore, an old friend, executive director of the West Coast Seafood Processors. I'd like to remind the witnesses about the 5-minute rule. Your written testimony will be included in the record in its entirety, and when you are in place and ready, Dr. Sampson, we will begin with your 5-minute testimony.

STATEMENT OF DAVID SAMPSON, OREGON STATE UNIVERSITY

Dr. SAMPSON. Mr. Chairman, Congressmen, ladies and gentlemen, thank you very much for inviting me to testify to you today. My name is David Sampson. I am an Associate Professor of Fisheries at Oregon State University. I'm also a member of the Scientific and Statistical Committee of the Pacific Fishery Management Council.

I'll try to describe for you briefly some of the aspects of stock assessment and some of the problems associated with managing West Coast groundfish. Our groundfish stocks are managed on the basis of catch quotas that are primarily determined from estimates of exploitable biomass and estimates of the target harvest rate. These are the two fundamental problems that a stock assessment tries to

address. Both of these problems are beset with uncertainties, and that's one of the things I'd like to illustrate for you.

The process, as it works on the West Coast, involves State agencies collecting information from the fishermen. Landings of fish that are brought to the docks are sampled for catch-at-age, maturity, things of that nature. And, in addition, we've heard from the National Marine Fisheries Service of their triennial trawl surveys that are measuring the abundance.

Together, those sources of information are fed into something called a catch-at-age analysis, which tries to reconstruct the size of the stock over time and where we currently stand. This is one of the fundamental problems of stock assessment. The information's also fed into what's known as yield-per-recruit analysis, or spawning-biomass-per-recruit analysis, which attempt to figure out an appropriate rate of harvest. Those are the two fundamental problems of stock assessment. Together, those two pieces of information are brought forward to the managers in the form of recommendations for catch quotas and the likely consequences of different types of harvest policies.

We heard a little bit from the others with regard to uncertainty associated with our stock assessments. Here's an example with our deep-water sablefish resource. It's assessed primarily to coincide with the triennial surveys. In 1994, there was an assessment which basically put the spawning stock at roughly one-third of the unexploited virgin level. And in 1994, we had reasonable catch quotas based on that assessment. Three years later, we had a new assessment based on a few additional years of catch history, and one additional survey. All of a sudden, we have a very different picture of the resource, one that, from the pessimistic view, shows the stock brought to almost as low as 10 percent of the unexploited level. So, part of the reason we're meeting here today was this very sudden change in perception of this resource.

Here is another example from one of our rockfish species, yellowtail rockfish. It was assessed in 1993 and a certain level of harvest seemed appropriate given the size of the stock. In 1996, three years later, we had new information from one additional survey and additional years of catch history, and we had a very, very different perception of the level of depletion of this resource.

Partly as a result of complaints about the uncertainty of this resource assessment, it was reassessed in 1997 and, in fact, the 1997 assessment, based on basically one additional year of information, put us back where we were in the 1993 assessment.

I think the sablefish and the yellowtail rockfish examples illustrate some of the problems and the uncertainties associated with trying to figure out how many fish there are in the ocean. It's a very big ocean, it's a very difficult job to figure out how much is out there and how much we can safely harvest.

Mr. SAXTON. May I just interrupt you for a moment?

Dr. SAMPSON. Certainly.

Mr. SAXTON. I'm trying to interpret. I understand the point that you're making relative to the difficulty in getting accurate information, or in drawing conclusions therefrom. This chart would tend to indicate that the later surveys indicated that there was a higher population than the earlier surveys. Is that correct?

Dr. SAMPSON. The 1997 assessment, which is the solid line there, basically came to a similar conclusion as the 1993 assessment, with regard to the size of the stock and how it got to that level. The 1996 assessment was the anomalous one, at least with these examples. These are not that unusual. In general, if you put together a sequence of assessments, the numbers we're getting from the assessments are bouncing around quite a bit. And I think that's a telling feature of stock assessment and the level of imprecision that we just have to live with when it comes to reconstructing what's out there.

I should have mentioned that, you should have written copies of these same figures in the testimony that I submitted.

Mr. SAXTON. We do.

Dr. SAMPSON. Finally, I thought I'd leave you with a picture of what's been happening with the fishermen and the size of the fishing fleet.

[The information referred to may be found at end of hearing.]

Dr. SAMPSON. This illustrates the growth in the number of hours of trawling on the West Coast since the implementation of the 200-mile law in 1976. In the early years of the fishery, most of the fishery was concentrated in relatively shallow water, relatively near the coast. And over time, especially through the late 1980's and into the 1990's, there was a dramatic increase in the amount of fishing on the West Coast, and there was a significant expansion into deeper waters, into areas which previously were essentially unexploited. The growth of the sablefish fishery, the thornyheads that we've heard about, and Dover sole—those are deep-water species which, prior to the mid-1980's, were essentially unharvested.

So, some of what we're seeing, in my view, with the current crisis is imprecision in our understanding of what's out there in the ocean. But also, our Council is handicapped in its ability to control the growth of the fishing industry itself. Catch quotas do not limit how many boats there are. We did put a limit on the number of boats, but it wasn't put in place until 1994. So, some of what we're seeing today, in my opinion, is a natural consequence of the combination of uncertainty about the status of the stocks and overcapacity in the fishing fleet.

Thank you very much.

[The prepared statement of Dr. Sampson may be found at end of hearing.]

Mr. SAXTON. Thank you, sir.

Mr. Gunnari.

STATEMENT OF GERALD GUNNARI, COOS BAY TRAWLERS ASSOCIATION

Mr. GUNNARI. Thank you, Mr. Chairman. I find it interesting that it does stop in 1994, when we did go into limited entry. I would like to see a current analogy of 1994 today. I think that the increase has gone to a decrease.

I wish to thank each of you for allowing me this opportunity to tell you about the West Coast groundfish crisis. The trawl fleet is made up of small, independent businesses, mosly family owned and operated. Many have been involved in the West Coast fishing for generations, like my family. I'm a fourth-generation West Coast

fishing family. We all take pride in supplying our Nation's tables with reliable source of fresh fish, providing jobs for our communities—it's new money, building our economy, and the exports of our valuable processed products are important to the Nation.

The trawl fleet is the traditional mainstay of supplying our Nation with a dependable source of fresh fish year-round, so restaurants and markets can put fish on their menus. The trawl fleet is the largest investment in supplying our Nation with fresh fish, and it costs a lot to operate and maintain a 75-foot fishing vessel capable of fishing 40 miles offshore in the dead of winter.

Suddenly, with this latest round of surprise cuts in allowable landings, our West Coast businesses are in crises. This ugly situation is rearing its head in many forms. We are the ones with the vested interest to see there are fish for our future. We welcome management measures that ensure this to happen. We need regulations that conserve real fish, not paper fish, to create landing reduction.

Irresponsible practices are now being implemented by NMFS, such as the ling cod harvest being reduced by 97.5 percent, which means a 75-foot vessel like mine can only supply 150 pounds of ling cod per month. The chair of the groundfish management team told the Pacific Fisheries Management Council that going from a 20,000-pound trip limit to a 500-pound trip limit would not create increased discards because most of the ling cod was from targeted ling cod trips, and only by a few vessels.

The results? The Pacific Fisheries Management Council illegally allocated from the people whose livelihood depends on fishing, to a few people who might catch some for fun and at the same time deprive our Nation's restaurants and markets of supply to the public. And the reality? I am 46 pounds over my monthly quota of ling cod right now, and I haven't even fished where ling cod live. All the ling cod I catch now will go back over the side of my boat, by law.

There's no accountability for anything NMFS does. Is Mark Salin so far, and the GMT so far out of touch that statements they make to the Council while creating allocations can be made on totally false information? Is there anyone who cares or is accountable for any of these actions?

Rick Methot's interpretation of the Magnuson-Stevens Act should be disturbing to you as well. Having neglected to gather enough data to determine proper harvest amounts, and then to use uncertainty in the data to automatically reduce landings of certain species, no matter what the condition that the stock is in, is wrong.

This methodology is creating discards we have never had before, and should not have now. Their current practices are not utilizing the best science available, but only what science they want to make available. More than 90 percent of the sports fish is from inside 30 fathoms, close to river mouths and shore. The only assessment of ling cod is outside 30 fathoms into central Oregon, so now more than 50 percent of the ling cod are suddenly shifted from an unassessed area and taken by the sports fleet from an assessed area and traditionally caught by commercial fishers.

We do not have conflicts with sports fishermen on the ocean, but we now have conflicts in Council meeting rooms. At the last PFMC

meeting, the desperation of not enough fish to pay the bills is becoming a predominant issue for many. The organized attitudes of one gear group that started throwing mud and dirt upon another gear group in attempts to sway the Council to take fish from one group, who have traditionally caught those fish, and give it to their group.

These are some tough issues to deal with. We all have to understand fellow fishers have no other recourse than to turn on each other. It's the only way some of them could see to increase their own landings. We get our fish the same way they get theirs. We earn it by working hard and investing in our vessels and putting in time over the years. Trying to steal someone else's fish and investment is not an acceptable solution, but is the result of management efforts. The trawl fleet's investments are many times greater than any of their gear groups. The cost of operations are real, and far-reaching effects into the Nation's economy.

The cutbacks we are facing proportionately affects our ability to pay our bills too, destroying generations of hard work and the very infrastructure dependent upon the fishing community. Over the past 10 years or more, we've been doing exactly what Rick Methot has recommended, only to find ourselves facing the worst situation ever, and they still don't have enough scientific data to make sound management decisions. Now Rick says there's not enough fish for all in the business to survive.

NMFS claims they need five new research boats at over $55 million each. The dock is full of such requests, lying idle in Seattle now. The fishing fleet has a thousand times the data collection capabilities right now. This money would go farther utilizing existing resources, and the cost of these research ships could buy out the entire West Coast fishing industry.

The West Coast fishing industry is at the crossroads now, and the most recent slashes in landings will cost $100 million in losses. The amount of harvest is calculated. No species is overfished, or even close to endangered. It's down to who will harvest the fish allowed. The burden of conservation must be shared equally, and if PFMC has a blind eye on this issue, we must be certain one man's dream come true isn't a nightmare for the man with the investment and the time on the ocean.

Thank you.

[The prepared statement of Mr. Gunnari may be found at end of hearing.]

Mr. SAXTON. Mr. Gunnari, thank you very much for your testimony.

We're going to move along to Ms. Garrison, the Natural Resources Defense Council.

STATEMENT OF KAREN GARRISON, NATURAL RESOURCES DEFENSE COUNCIL

Ms. GARRISON. Natural Resources Defense Council. Thank you, and it's a pleasure to be here today. We've had a wake-up call on Pacific groundfish. It's clearly a call to do a better job gathering and analyzing information, and that includes not just more frequent surveys and stock assessments, but also estimates of bycatch and assessments of habitat that may be at risk.

It's also a reminder of the critical need to apply the new provisions of the Magnuson-Stevens Act where fisheries are in crisis, and where they're considered relatively healthy, as you pointed out these were about a year ago. The Act has extraordinary power to transform fishery management for the better, but the habits that get us into trouble are very tenacious, and you've heard some of them today. You'll be asked more than once to say you didn't mean what you said in the Act. I know Congress never does that. What happened with groundfish illustrates many of the reasons you passed the Act, and now need to stick by its original intent.

For example, over the years, participants in the process have downplayed uncertainty, rather than taking it fully into account, as the Act's guidelines require. The fishery suffers from overcapitalization, from high by-catch rates, from increasing use of roller gear that's thought to be damaging to rockfish habitat.

So improving the data is important, but more precise data is not enough. Twice-a-year surveys didn't help the New England groundfish. We need to be addressing these other related problems, and I'm going to talk about several of them briefly.

First, the data. In addition to improving our information for species of known status, we need to conduct whatever level of stock assessment is feasible on most or all of the 68 species of unknown status, focusing more resources on trouble spots like near-shore rockfish. This is a high-value, high-pressure fishery headed for a boom and bust cycle if we don't attend to it. And it's not just happening in southern California; it's happening in Congressman Farr's district as well.

More funds are likely to be needed to get the information that we need, and Congress can help. NRDC and other organizations are recommending the creation of the ocean equivalent of the land and water conservation fund to finance applied marine science. Your support for that would be welcome.

Second, we need a more precautionary approach to taking account of uncertainty, because it will always be there. If we want to avoid surprises like this one, we have to end what I call the "conspiracy of optimism" in the way we interpret data. We have to stop assuming that more precise data will allow us to keep shaving as close as possible to the danger zone. That means acknowledging the full extent of uncertainty, and not using it as an excuse to reinterpret scientific advice, as we believe the Council did for a couple of stocks last year.

We support the Council in its consideration of other precautionary steps, like the use of more conservative harvest targets and the creation of no-fishing reserves for groundfish, which could serve as an insurance policy against the possibility of being wrong. While the details of those measures should be up to the Council and NMFS, Congressional support for more precautionary management is essential.

Third, capacity reduction, as others have said, is a vital step toward relieving the pressure on groundfish, reducing by-catch, and making the fishery more viable for its participants. To be effective, the program should retire capacity, not simply shift it to other fisheries. Virtually all West Coast fisheries are overcapitalized now, and some important State-managed fisheries, (or unmanaged fish-

eries, as in the case of squid), are open enough to become easy targets, or maybe we should say victims, for excess capacity.

The current proposal to retire permits, not vessels, fails this and other tests of a good program. We urge Congress to insist on a buyback program that complies with Magnuson-Stevens and avoids the risk that removed capacity will resurface elsewhere.

Fourth, current high by-catch rates for the trawl fleet intensify the pressure on vulnerable groundfish species. The first step toward reducing it is a mandatory observer program, with full coverage for large vessels and partial coverage for small vessels. That program is needed now. Measures to reduce by-catch are also critically needed, and should include incentives or rewards for clean fishing.

Finally, protection of habitat is essential if we want to sustain the long-term productivity and diversity of the groundfish fishery. NMFS' initial proposal for groundfish habitat conservation is a commendable step in the right direction, and the Council should take it further.

In conclusion, Congress can take a number of steps that will help avoid unwelcome surprises in the future. They include providing funding for data collection and analysis, supporting expanded stock assessment for groundfish, affirming the commitment to the precautionary principle, encouraging the development of a mandatory observer program and by-catch reduction measures, and insisting on retiring vessels, not permits.

Thank you.

[The prepared statement of Ms. Garrison may be found at end of hearing.]

Mr. SAXTON. Thank you very much, Ms. Garrison.

And now, last but certainly not least, Mr. Moore.

STATEMENT OF ROD MOORE, EXECUTIVE DIRECTOR, WEST COAST SEAFOOD PROCESSORS ASSOCIATION

Mr. MOORE. Thank you, Mr. Chairman. It's a pleasure to be here, and we appreciate your interest and Mr. Farr's interest, and Mr. Miller's interest, and Mr. Young's interest in our poor, measly fishery out there on the West Coast. We're trying hard, and we're glad you had this hearing today. It's already been productive with Rollie's announcement this morning of supporting the trip limit overage program. That's something the industry has been pushing for. We're very pleased to see that NMFS is supporting it, and I'm glad that this sort of was the occasion for doing that.

And Mr. Farr, you talked a little bit about how Congress responds to crises. Now, unlike New England, our crisis is not no fish. Our crisis is no science. In my view, the problems we're facing today are a direct result of 20 years of scientific neglect, which are compounded to a certain extent by management policies driven by paranoia over New England.

Let me read you a very quick quote. This is from a report that was done by a scientific review panel set up by NMFS on West Coast groundfish stock assessments from 1995.

"Due to the lack of a reliable index of abundance, many different interpretations about the status of the stocks are consistent with the historical data, and it is not possible to choose among them on

scientific grounds." In other words, we didn't know what we're doing and we don't know what's out there.

Dave Sampson showed you some numbers on yellowtail rockfish, or some charts on yellowtail rockfish. I'm going to put some numbers to that: 27,784 metric tons, and 85,263 metric tons. Those were the low point and the high point from different assumptions of the stock assessment in 1997 on yellowtail rockfish.

Now, Mr. Saxton, if you were running for president, and you hired a pollster to go out and assess the American people's support of your candidacy, and the pollster came back and said, well, either 27 percent of the people support you, or 85 percent of the people support you, you know what you'd do? You'd have that pollster go work for your opponent.

Mr. SAXTON. And then I probably wouldn't run.

Mr. MOORE. And then you probably wouldn't run.

[Laughter.]

I'm not trying to start any rumors, but that's the sort of thing that the Council is having to deal with. And that's what makes it real difficult for them, and why we get into all of these disputes at the Council level.

Then you get into management policy. Now, Karen talked about being precautionary, and Phil mentioned the new management policy they're looking at. Well, what that new management policy is, is that, when you have any sort of uncertainty, which we have all the time on West Coast groundfish, you have to set the harvest level at a rate at least 3 percent below the rate that provides MSY. Now, even when you changed the law in 1996, you didn't say, never fish to MSY. Yet some mysterious working group in the National Marine Fisheries Service has come up with this harvest policy, which they're trying out on us and, I suspect, on other Councils in the near future, which says, hey, you guys are never going to be able to get even close to there, no matter what you're doing.

You passed the Sustainable Fisheries Act, not the Stop Fishing Act, and somebody in Silver Spring needs to be reminded about that.

Now, the industry has been trying to respond to all of this. We've been trying to find innovative ways to solve the root problem, which is getting more data. The Oregon Trawl Commission has been conducting a pilot observer program for several years, funded by the industry. Our processors are embarked on a project now with a graduate student out of Newport, Oregon, trying to demonstrate that processing workers can be used to provide data to improve the stock assessments.

Gerald Gunnari was the first of several fishermen who went on board the Miller Freeman and demonstrated to NMFS how their survey gear could work a heck of a lot better. We've got a port interview project starting. We've got an electronic logbook project starting. All of these things are ways that we are trying to be innovative and support getting more data, and finding out what's out there.

Now, yes, I complain about the National Marine Fisheries Service but, you know, we've gotten help from them too. Rollie mentiond the $750,000 that he put into the budget this year. Rick Methot and I have attended more meetings together, talking

about—trying to figure out ways where the industry and NMFS can work together to try to do something, and try to do something positive.

Unfortunately, you know, all of this takes a lot of time and, you know, we really don't feel we should have to be here pleading that the Nation's fisheries agency be doing more basic research. We're committed to keep going until we get the problem solved, or until we go broke. You know, it's taking time to do all this stuff, and as the lights show, for us, time is running out.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Moore may be found at end of hearing.]

Mr. SAXTON. Thank you very much, Rod.

Let me just pose a question for any of you who would like to respond. I have another job here. I'm chairman of the Joint Economic Committee, and every month we hold an employment hearing. And sometimes we have very high rates of growth in employment, and sometimes we have negative growth rates in employment. In other words, we lose jobs. And we would like to, you know, come to each monthly meeting and say that we've had a very steady climb in employment. We never, ever, ever get that.

It's much the same pattern that you have, and, you know, obviously, we're not going to solve that problem because part of it has to do with real rates of employment and unemployment; other has to do with flaws in our method of measuring employment and unemployment. And I suspect the same principle holds true in fisheries. So the difficulty in statistics, gathering statistics on fisheries is partly that we have not funded the activity well enough, partly because there are flaws in methodology, and partly because, as we know, there are spikes and valleys in populations, which occur naturally. And, in addition to that, I would submit at least that there are diminutions of populations that occur because of overfishing. I hope that we can at least agree on all that.

And so, given the fact that we're never going to have perfect statistics, it would seem to me that if we had a 27,000 metric ton estimate one year, and 83 million ton, or whatever the big number was.

Mr. GUNNARI. It was the same year, Mr. Chairman.

Mr. SAXTON. Same year. OK. It would seem to me that somebody would have to somehow conclude that, given those sets of circumstances, that we would have to set, begin to set limits of catch, or limits of take, based on the full set of parameters that we have to work with, which are far from perfect. And from Karen Garrison's point of view, she would not want to have the limits set too high, because if we collapse the fishery, she would have failed to do her job. And seems to me that Gerald Gunnari might want to have a conservative limit on take set as well because, if he's like the fishermen, at least in my neighborhood, he's got mortgages on his boats, and families, and economic issues to worry about. And if the fishery collapses, it's not good for him.

So it seems to me that we ought to be able to conclude together that, given the statistical base that we have to work with, which is not perfect, given the fact that we all have economic concerns and resource concerns, and kind of pull us to a common conclusion

that we have got to set limits based on some kind of reasonable and conservative guidelines.

Now, I would just like to begin with Dr. Sampson and work our way across the table, and see how you all respond to that, and see if there is some common ground perhaps. David?

Dr. SAMPSON. Yes, thank you, Mr. Chairman. I think some of the problem is that we all have different, in a sense, discount rates. We all have different degrees of comfort with uncertainty.

Fishermen are, perhaps, dealing with uncertainty in a very fundamental way that most of us don't even contemplate. They're putting their lives on the lines, oftentimes, when they go out to sea. And that's a regular occurrence for them, and I suspect that they inherently have a different willingness to take risks, perhaps, than the rest of us. And so I think some of the discrepancies we have, and the difficulties we have on agreeing as to what's a reasonable policy is a reflection of a different ability to cope with uncertainty. How you get around that problem, I don't know. I think the Council process is involved in debating what is a reasonable level of risk.

I think, historically, the scientific crew has not done a very good job at making the gamble clear to the managers. If you do this, there are certain consequences that are likely to follow. If you take some other course of action, these are the likely consequences. We haven't laid things out for the decisionmakers on that basis, and I think that's a failing of the scientific community, and we are, I think, collectively working to remedy that. But ultimately, we don't know the certain outcome of a particular course of events. We are going to be making gambles with our resources. I think that's an inherent part of fisheries management.

Mr. SAXTON. Jerry?

Mr. GUNNARI. Yes, I think your assessment is fairly accurate about the increases and decreases. I've been fishing for many years and watched bocaccios move into our area thick. I've watched them move out of our area, watched true cod come in and go out. Dover increase and decrease. Sable fish. All of our stocks fluctuate greatly, and we do appreciate good conservation measures that conserve real fish, not paper fish.

The 97.5 decrease in our ling cod this year, I don't believe is a reasonable situation. We're not seeing this type of decline on the grounds. In fact, we've had some pretty fair year classes a couple of times over the past 10 years that have not been reflected anywhere in any of the data. So I think that there should be a balance, and the fact of using the full range as the model outputs.

One thing that I see as a real problem in modeling is the models can only model the catch. When you drop 97.5 percent of the catch, of course, the model is going to say there isn't any. And makes modeling, I think, more complex than ever, because as the catch goes down, which it has in recent times, the model goes down. And so it's kind of an exasperating situation.

Mr. SAXTON. Ms. Garrison?

Ms. GARRISON. Yes, I also agree with your assessment, and I agree with David's suggestion that scientists need to make the gamble more clear. I think that you're right at mentioning that it's a combination of factors, that we've got natural variations in fish

populations. We've got pressure on habitat. We've got long-term climatic and ocean-temperature shifts. And it is often the combination of these factors that throw us for a loop.

I think in addition to being more careful about the way that we set catch limits—and we are fine-tuning that process all the time and, I think, getting somewhat better at it—we need to think about things we can do outside that process that provide insurance. And that's one of the reasons that so many people have gotten interested in the concept of no-fishing reserves. I think they are going to be an important part of the process, particularly for groundfish, where there are some species that are quite vulnerable because they're long-lived and they're subject to by-catch. Reserves appear to be a particularly good tool for species like that, and may be able to allow catch levels to stay higher on short-lived fish, because we will have some places where long-lived rockfish can safely breed and spawn and grow large and keep reproducing at high rates. Thank you.

Mr. SAXTON. Mr. Moore?

Mr. MOORE. You know, Mr. Chairman, during the many years I had the honor of working with you on staff of the Merchant Marine and Fisheries Committee, there were a lot of times I heard fishermen, processors come in and say, oh, we got problems, you got to find us more fish. And it's real easy to do that, to come in and say, gee, you know, we're not making any money, we're all going broke, you know, so you got to give us more fish. Well, the Congress can't legislate fish that aren't there, and they shouldn't even try to do something as silly as that. Which is why, you know, none of us are here today saying, hey, you know, you got to get us more fish.

What we're trying to do is address the root of the problem, which is the fact that we don't know what's out there and we don't know what's going on out there. And those are the sorts of things that need to be done. David is absolutely right in talking about the scientific community doing a poor job of describing the risks of uncertainty. I've seen that happen in the Council innumerable times with the numbers that are presented for final approval by the Council, versus all of the work that's gone on by the scientists and the resource managers before that. That process we're internally trying to fix within the Council system. That's not something you guys should be involved in. It's something that we're all trying to do.

Yes, you've got to be precautionary, but at what point do you allow yourselves to be precautioned out of business? And that's the difficult problem.

Mr. SAXTON. Thank you very much. We're going to go to Mr. Farr now, and I would just like to say at this point that we're going to draw to a close about a quarter after, Sam, so you proceed at your pace. The time is yours.

Mr. FARR. Well, thank you Mr. Chairman. As you can see, I'm a little bit more on a philosophical level today than I am on a technical level. And one of my questions is how do we get the industry to be, to respond more to this issue of being involved with the science. What you're talking about is the lack of science. My experience is that when an indusry benefits from a resource, it puts a lot

of its own money into research, and collaboration with the government.

The point was made here that in all the other resources that this Committee manages, like timber, water, mining, there's a partnership. The regulatory responsibility is the government responsibility, but there's really an area out there where there is a partnership, and that is on trying to get the best data we can so that we can sustain this over a long period of time. And I think what we're in, our generation, you as responsible leaders in your roles and we in Congress, that in the next 10 years—and Chairman Saxton is talking about the Joint Economic Committee. The real goal here——

Mr. SAXTON. In 10 years, I'll be on my sailboat.

Mr. FARR. But, I mean, in that period, it's not whether we'll be here in 10 years. But I think this next decade, where we have to use our professional abilities, is to really nail down how can you sustain an economic enterprise, not just use it and lose it. You know, I live in the "Salad Bowl of the Nation"—I'm also on the Agriculture Committee, and we have a $2.2 billion agricultural industry in one county that I represent. And it's a county where everybody wants to live, so it's a land use fight. I mean, we're going to bury the goose that lays the golden egg by just paving over agriculture which grows crops that don't grow anywhere else?

Your fisheries are the same way. I mean, these fisheries aren't necessarily all over the planet. It's not that they can just be picked up by somebody else. Yes, we can change our diet, we'll eat a different fish, and that will always be available. But there's a responsibility here by the private sector to be there. And I agree with the statement of the young man talking about the ling cod fisheries—I mean, we ought to be, if there's capability of having the fishing vessels rented for, or leased for, scientific purposes, we ought to do that. I mean, I know in my district—in sport fishery, these guys usually went broke during the winter time. Now they're making more money off whale-watching than they are off sport fishing. So, there are alternative services that can be provided.

And I, frankly, think that if we're really smart about this, we're going to develop an ecotourism around the ocean that we have not even yet discovered yet, and we will all benefit from that. But, how do we bring your industry to be a partnership with it? Because we can either go out there and do an assessment fee, to which you'd have to agree. The politicians will never put it on you, because, you know, it'd be a tax, and so on. But if the industry came along and could really believe that if you put money together in some kind of a collection process that could be used solely for the purposes which you've discussed today, could it be possible to do it that way? Because I think this is an industry where you've got to have the private sector doing a little more heavy lifting than they are. And the public sector's got to be more accountable to it.

Mr. MOORE. Mr. Farr, if I can try to answer that question. And, I can't resist—I've got to say, as far as the—I don't want to disparage my colleagues in the agricultural community, but if we had 10 percent of the Federal research support that agriculture has got, we'd be in great shape, we'd know a heck of a lot more about the

fisheries. But, if I may, Mr. Farr, just to answer your question, which is a very good one.

Why shouldn't the industry be more involved? The fact is we are, we're trying to be more and more every day. I went through some of the stuff in my testimony on things we've already done, but, you know, we've put our own money up to try to design an expanded logbook program and a pilot observer program, something that, you know, in some parts of the country, is paid for by the Federal Government.

We've put, we've used our own time and resources and effort to put people on board the research vessels to help them improve their research gear. We've got processing workers that we're trying to train to do the job that right now State and Federal workers, mostly State workers do. I've been talking with the National Marine Fisheries Service about trying to get some more fish-ticket data to them so they can use it in their stock assessments. The industry's put together a fund to hire, through an independent contractor, a scientist to do stock assessments and run them through the peer review process.

You know, there are all of these things that we're all trying to do out there, and sometimes, unfortunately, we've had to drag the National Marine Fisheries Service kicking and screaming into it. And, you know, I understand their point of view, because it takes a lot longer for the bureaucracy to do something and to come to a decision, and scientists are by nature cautious, as opposed to the sort of risk-takers that Dave Sampson talked about that are fishermen and processors. You know, we've got to be innovative every day to stay alive economically.

Mr. FARR. What if we had something in the line of like a duck stamp for all fisheries? The duck stamp has generated so much money. It's gone back into habitat restoration, so much so that we had a hearing in this room about there's too many snow geese around, and we ought to have a better method of taking them.

Mr. MOORE. You know, Mr. Farr, if I remember—I can't remember the exact year. It was something like 1987 or 1988. Chairman Young introduced a bill for a minimal fisheries fee, it was like $15, something like that, on commercial fishing vessels, and another one, but the same price, on sport fishing vessels, with all of the money to be dedicated to research. There was nobody who supported it, and that's——

Mr. FARR. Did the industry support it?

Mr. MOORE. I'm trying to remember back then. Yes, we had gotten some support. I was working for Mr. Young at the time on Merchant Marine and Fisheries Committee, and we did get some industry support out of it. We unfortunately got none from the recreational community, and the worst case was a letter we got from the State director of fish and game in Arizona, who was complaining about this marine use tax being put on fishermen. And the last time I looked, Arizona doesn't have a marine coastline. But that was sort of the nature of the opposition that was generated out there.

The processing sector, within the Pacific Council, is talking right now about trying to get the Council to put a permit requirement on groundfish processors. So we have a start of knowing who's out

there, and what they're doing. And at some point, if the Congress changes the law and says you've got to pay a fee to get a permit, then we expect we're going to get charged. And if that money can be dedicated to fisheries research, great. But right now, what we're trying to do is, with our meager resources—none of us are rich, you know. But we're trying to pool as much money and manpower and sweat equity as we can to improve the data base, and work with the Federal Government to doing that.

Mr. FARR. What's lacking to do that? Because I think there's enough willpower here, if we get everybody in the room. It's one of those things where you have a common agenda. Hopefully, we can work some of that out with this oceans conference in Monterey in June. I mean, I think we just sort of open the door on these issues, and then we do the substantive work, heavy lifting, next year.

But, you know, you talked about a lack of scientific data. I'm involved with this oceans conference. I'm just learning of all the incredible opportunities that the Navy's had. You know, I was kind of getting a kick out of the National Marine Fisheries talking about how they don't know anything. And yet, right across, the building across the way, they're sitting there in the Navy committee on the intelligence, where they say they know everything that goes on under the ocean. Why does one arm of the government know so much about what happens under the ocean, and the other arm of government knows so little? I mean, there must be some data that can be shared.

Mr. MOORE. You know, Mr. Farr, if I could figure out why one arm of the National Marine Fisheries Service knows something about the ocean and the other arm doesn't, I'd be satisfied at that. Yes, there's a lot of synergistic, piggy-backing sort of things that can go on out there.

For example, the National Oceans Service has got what they call the GLOBEC program, which is run out of the Woods Hole Oceanographic Institute. And on the West Coast, they're starting to look at some basic oceanographic stuff, but it's dedicated mostly to production for salmon. And we've been asking the question, hey, is anybody looking at that, and seeing if you can turn it into something for groundfish as well. Because groundfish is where the need is. That is happening. You know, Rick Methot told me the other day that yes, they're starting to try to see if they can use some of that data.

There's lots of things that are going on, and one of the things that needs to happen is somebody, somewhere needs to sit down and look at all of these projects that are being done by the industry, by NMFS, by other arms of NOAA, by the military, by the universities. Put them all together, see where they are duplicating their efforts, and perhaps they shouldn't be doing that.

Mr. FARR. Time's running out. In your opinion, who—what—I mean, certainly, this Committee could do that, but we don't have the time or the resources to do it. Who does?

Mr. MOORE. Could be anybody, you know. You could certainly ask either NMFS or NOAA to do it. The Council, I know, doesn't have the resources. The industry is talking about putting together a private conference in July, and one of the background things for this is to try to identify those various things. You know, even if—

the Northwest region of the National Marine Fisheries Service has got couple of hundred people devoted to salmon. You know, if they could let one of them lose and say, hey, you're going to go do some stuff on groundfish, which is going to be so simple as to call people up on the phone and say, what kind of research are you doing? Tell me about it. Send me a synopsis. And put it all together so we all know what people are doing. That would be great.

Mr. FARR. Could you do me a favor on your way back to—are you here, or in the West Coast?

Mr. MOORE. I'm in Portland, sir.

Mr. FARR. On your way back to Portland, why don't you just jot out just what you said about who should be at the table, and we ought to do it by region. We ought to do it in the West Coast. I'd be very interested in that. I think this is—we're at a stage where we need to mediate between all of these issues. This isn't just legislating or appropriating.

Mr. MOORE. Great.

Mr. FARR. And I'd be glad to be involved in that.

Mr. MOORE. Well, actually Mr. Farr, I'll do you one better because I'm going to be here until May 8, so I'll get together with your staff between now and then, and be happy to talk to them about it, and try to get you some ideas.

Mr. FARR. OK.

Mr. SAXTON. Mr. Farr, thank you very much. One final thought from Mr. Gunnari.

Mr. GUNNARI. Well, I'd just like to say that trawl fleet did tax themselves 1 percent to get their own observer program going, and we will have to probably abandon that this year due to the $100 million crunch that we're having on the West Coast. There's no money from our industry any more. We've been totally—our abilities to pay our bills have been taken away.

Mr. FARR. Is that El Niño?

Mr. GUNNARI. Negative. It is the current reductions in landed catch.

Mr. FARR. SBA just opened up a—help for fishers.

Mr. GUNNARI. Maybe they could go for an observer program and some of these other things.

[Laughter.]

Mr. SAXTON. Well, thank you very much for coming all the way from the West Coast to be with us, in the case of at least some of you. We appreciate it very much. I believe we have benefited much from your testimony, and we thank you and we look forward to working with you in the future. Thank you. The hearing is adjourned.

[Whereupon, at 1:15 p.m, the hearing adjourned subject to the call of the Chair.]

[Additional material submitted for the record follows.]

HEARING ON H.R. 3498, THE DUNGENESS CRAB CONSERVATION AND MANAGEMENT ACT

THURSDAY, MAY 7, 1998

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS, COMMITTEE ON RESOURCES, *Washington, DC.*

The Subcommittee met, pursuant to notice, at 11:03 a.m., in room 1334, Longworth House Office Building, Hon. Jim Saxton (chairman of the Subcommittee) presiding.

STATEMENT OF HON. JIM SAXTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. SAXTON. Good morning, Ladies and Gentlemen. The Subcommittee will come to order. The Subcommittee on Fisheries Conservation, Wildlife, and Oceans is meeting today to conduct a hearing on H.R. 3498, the Dungeness Crab Conservation and Management Act.

Since the 1960's, the States of Washington, Oregon, and California have successfully managed the Dungeness crab fishery. In the early 1980's, the States signed a Memorandum of Understanding and later amended it to ensure the sound economic and biological utilization of the crab fishery through cooperative State management actions.

It wasn't until 1994 that the State management of the fishery came into question, based on the States' lack of management authority in the Federal Exclusive Economic Zone. A Federal court ruling allocated to Washington State treaty tribes 50 percent of the harvestable surplus of the shellfish resource in their usual accustomed fishing areas. After the ruling, concerns were raised over the ability of the States to ensure the tribal treaty allocations in the Federal Exclusive Economic Zone.

In 1996, Congress authorized limited interim management authority over the Dungeness crab fishery in the Federal Exclusive Economic Zone to the States of Washington, Oregon, and California. The authority was made interim because Congress believed that the Pacific Fishery Management Council, the council with jurisdiction over the Dungeness crab fishery, would develop and implement a fishery management plan. However, the council recently requested that Congress expand the interim management authority and make it permanent.

Our colleague, George Miller, introduced H.R. 3498, the Dungeness Crab Conservation and Management Act, on March 18 of this year with seven original cosponsors. The fundamental goal of this

legislation is to implement the Council's request and allow the valuable fishery to remain successful in the years ahead.

The Subcommittee is here today to discuss the merits of H.R. 3498. I look forward to hearing from our distinguished witnesses.

I now recognize one of the Minority Members, whichever. Mr. Miller, I guess, would—the sponsor of this bill.

Mr. MILLER. Thank you, Mr. Chairman.

Mr. SAXTON. It must be a scholarly work for you to be the cosponsor.

Mr. MILLER. It is. It's a scholarly work. It's perfection. If you guys don't recognize it, don't speak up.

[Laughter.]

But I want to thank you very much for holding this hearing and for the witnesses for taking their time to come and testify. Because I am late, I will put my opening statement in the record and look forward to the testimony of those individuals in support of the legislation.

Mr. SAXTON. Mr. Pallone, do you have a statement?

STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Yes, Mr. Chairman. I'll put my statement in the record, too. But let me just summarize a couple of these things, because I know that you've mentioned already the basic management structure. The way I understand it, the three States, Washington, Oregon, and California, have control within the three miles adjacent to their respective states and with regards to the EEZ, they regulate vessels with permits from their own States. And they have entered into this Memorandum of Understanding.

What the bill would do would be to basically have Washington, Oregon, and California manage the crab in the EEZ. To some extent, my understanding is that this is a precedent by having Congress legislate the management plan, rather than a regional council and some questions have been raised as to why the Federal legislation is necessary when these concerns could be addressed by the Pacific Management Council. And I know that supporters of the bill have asserted that the unique and historic management of the fishery warrants this particular type of management authority with the State.

But I'm curious to hear who would be responsible for conducting the research and the stock assessments on the fisheries, the States or NMFS, and I would look forward to hearing from today's panel in, you know, helping us basically explain why this type of unique arrangement is necessary and should be carried forward the way the bill sets forth. Thank you, Mr. Chairman.

[The prepared statement of Mr. Pallone follows:]

STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

I would like to thank the Chairman for holding this hearing on H.R. 3498, the Dungeness Crab Conservation and Management Act.

Mr. Chairman, as you know, Washington, Oregon, and California have managed the harvest of the Dungeness crab through standardized methods of measurement for size regulations and opening dates since the 1960's. These states have control within the three miles adjacent to their respective state. With regards to the EEZ (Federal Exclusive Economic Zone), the States are permitted to regulate those ves-

sels with permits from their own state. More importantly, to ensure that there is a consistent harvest of this stock, the three states have signed a Memorandum of Understanding (MOU).

H.R. 3498 would allow Washington, Oregon, and California to manage the Dungeness Crab in the EEZ. I understand that this bill would set a unique precedent, by having Congress legislate a management plan rather than a regional council. Questions have been raised as to why Federal legislation is necessary when these concerns could be addressed hy the Pacific Management Council. I know that supporters of this bill have asserted that the unique and historic management of this fishery warrants the transfer of management authority to the States.

I am also curious to hear who would be responsible for conducting the research and the stock assessment on this fishery—the States or the National Marine Fisheries Service.

I look forward to hearing from today's panels in helping us address this very important issue.

Mr. SAXTON. Well, Mr. Miller, I note that Mr. Pallone has some questions.

[Laughter.]

I ask unanimous consent that all Subcommittee members be permitted to include their opening statements on the record. Without objection, I would now like to introduce our witnesses.

[The information referred to follows:]

Mr. SAXTON. On panel one is a Mr. Dave Evans, with the National Marine Fisheries Service; Mr. Phillip Anderson, of the Pacific Fishery Management Council; Mr. Randy Fisher, representing the Pacific States Marine Fisheries Commission. I would like to remind our witnesses that oral testimony is limited to 5 minutes. However, your written testimony will be included in the record. OK. Bill Robinson is also with Mr. Evans. Welcome aboard, all four of you.

I would now like to recognize Dave Evans.

STATEMENT OF DAVID EVANS, DEPUTY ASSISTANT ADMINISTRATOR FOR FISHERIES, NATIONAL MARINE FISHERIES SERVICE; ACCOMPANIED BY WILLIAM ROBINSON, ASSISTANT REGIONAL ADMINISTRATOR FOR SUSTAINABLE FISHERIES, NATIONAL MARINE FISHERIES SERVICE NORTHWEST REGION

Mr. EVANS. Thank you, Mr. Chairman. Thank you for inviting us to testify before your Subcommittee today on Dungeness crab management. I'm accompanied today, as you noted, by Dr. William Robinson, who's the Assistant Regional Administrator for Sustainable Fisheries in the NMFS Northwest Region.

The National Marine Fisheries Service supports the passage of H.R. 3498, the Dungeness Crab Conservation and Management Act, as a unique solution to an unusual set of circumstances. Before the Federal District Court's 1994 Rafeedie decision, no treaty fishing operated on an ocean species not managed by a Federal fisheries management plan (FMP). In the 1996 Sustainable Fisheries Act, Congress provided interim authority to West Coast States to regulate all vessels, regardless of the state of origin, in Federal waters off each State in the absence of an FMP. Congress also directed the Pacific Fishery Management Council to develop a Federal FMP.

The Council considered the development of a Federal fisheries management plan, but concluded that the current tri-State management regime for Dungeness crab was managing the fishery well

and was well-suited for dealing with the tribal treaty rights. Section 306 (a)(3)(A) of the Magnuson-Stevens Fishery Conservation Act recognizes State jurisdiction to manage vessels registered to a State when those vessels are operating outside of the State waters, if there is no FMP for the fishery being pursued.

In its report to Congress, the Pacific Council found that there was a legitimate interest of the three west coast States to continue to retain management authority that they had exercised over the Dungeness crab fisheries for over 60 years and to extend the interim authority granted by Congress to allow the continued tri-State management. NMFS concurs with this finding, with the understanding that, if any time, the Secretary or the Council should determine the need for a Federal Dungeness crab FMP, a Federal FMP could then be implemented. At that time, the state authority in the EEZ that is not provided for in the fisheries management plan would be terminated.

NMFS believes that the current H.R. 3498 language provides for this, but proposes clarifying this authority with language similar to that found in 306 (a)(3)(C) in the Magnuson-Stevens Act, to be added to the end of paragraph 306 (d) of H.R. 3498, in that: "The authority provided under this paragraph shall terminate when a fishery management plan under the Act is approved and implemented for this fishery."

It's clear from Section 306 of the Magnuson-Stevens Act that Congress has recognized that a State's authority extends to its registered fishers when they are participating in a fishery for which there is no Federal FMP. It is also clear from this section that only rare and unusual circumstances would support extension of a State's authority over vessels from other States operating in the EEZ adjacent to that State's waters. NMFS believes that this fishery's unique circumstances, such as the fact that the fishery is pursued predominately in State waters; the long-term cooperative State-level management that includes limited entry programs; the fishery's tribal treaty obligations; the current historic lack of a Federal FMP; the small number of States with jurisdiction over the range of the species; the clear latitudinal borders between the States; and the specific request of the Pacific council for extension of State authority all merit consideration of extending special State authority over Dungeness crab, as described in the bill.

Our support for the bill was based on a careful consideration of the exceptional nature of the management situation of this fishery and the recommendation of the council. It is our understanding that the bill does not diminish the Secretary's authority to develop an FMP—a Federal FMP for Dungeness crab, in the future. Our support for this bill should not be interpreted as extending this approach beyond this fishery with its unique characteristics.

We also recommend that, say within three years after this legislation is passed, that the council make a report to Congress that reevaluates the potential need for Federal management and a Federal FMP.

That concludes my oral testimony this morning, Mr. Chairman. I'll be happy to answer any questions that you might have. Thank you very much.

[The prepared statement of Mr. Evans may be found at end of hearing.]

Mr. SAXTON. Mr. Anderson.

STATEMENT OF PHILIP ANDERSON, PACIFIC FISHERY MANAGEMENT COUNCIL

Mr. ANDERSON. Thank you, Mr. Chairman, and good morning. I appreciate this opportunity to testify before the Committee. My name is Philip Anderson. I represent the Washington Department of Fish and Wildlife on the Pacific Fishery Management Council and I am here today on behalf of the council.

The council appreciates the opportunity to testify on H.R. 3498, a bill to amend the Magnuson-Stevens Fisher Conservation and Management Act, to authorize, in the absence of a Federal fishery management plan, the States of Washington, Oregon, and California to regulate the Dungeness crab fishery in Federal waters. If enacted, the bill would implement the recommendations submitted by the council in its report of October 1997. We request that the report be made a part of the record of this hearing.

[The information referred to may be found at end of hearing.]

Mr. ANDERSON. The council adopted these recommendations by a unanimous vote after considering, together with the tribes and industry representatives, the most efficient and cost-effective means of managing the Dungeness crab fishery off the coast of California, Oregon, and Washington. The management elements incorporated in the bill represent an agreement amongst industry representatives, tribal representatives, the State, and fish and wildlife agencies captured through the regional council process. The regional council process was the mechanism that we used to develop this recommendation.

The basis for the recommendation are as follows. First, it avoids the duplication of the current management regime. Historically, the States have managed the fishery and have the technical expertise to continue that into the future. And that addresses the question about where is the expertise and where will it come from in the future to manage this fishery. Research, biological considerations for management, and monitoring the landings, doing test fisheries, and we also, the State of Washington, has observers that we have go on the fishing vessels to monitor the condition of the resource and the catch per unit of effort. The overlay of a Federal plan would add an unneeded cost to managing this fishery. In addition, industry representatives would avoid the added cost and time-burden of participating in both a State and Federal management system.

The bill does not preempt future Federal management. Dungeness crab are not currently managed under a Federal FMP. If, in the future, the council determine that the management of the Dungeness crab resource would be improved under a Federal management plan, nothing in this legislation would prevent them from taking such action. It does not preempt Federal authority.

It is consistent with the current cooperative management process that produces State/tribal management plans. This year we developed four State/tribal management plans for Dungeness crab: one with the Makah Indian Nation, one with the Hoh Indian Tribe, one

with the Quileute Indian Tribe, and the fourth with the Quinault Indian Nation. Federal District Court Judge Edward Rafeedie's August 28, 1995 implementation order, in combination with the court-approved stipulation between the State of Washington and the Quinault Indian Nation, requires the State and tribes to develop joint harvest management plans and/or cooperatively manage shellfish resources within the tribes' usual and accustomed fishing grounds and stations.

This bill would avoid the need for a duplicative Federal process, while allowing the State of Washington to implement and enforce equitable management measures for non-Indian fisheries operating within the tribes' usual and accustomed fishing areas that extend into Federal waters.

Finally, the bill would expand limitations placed on the interim authority currently provided to the States for Dungeness crab to include any management measure needed, with the exception of the State limited entry laws. This would allow us to deal with problems of overcapitalization that currently exist in the coastal fisheries that the interim authority does not provide. Moreover, the bill would limit participation to fishing or processing operations licensed by either California, Oregon, or Washington, another consideration that is not included in the interim authority.

For these reasons, the council is recommending that it continue to focus its efforts and fiscal resources on Federal management plans for species, such as salmon, groundfish, and coastal pelagics that have coastwide migration and distribution; have international implications, such as with the Pacific Salmon Commission and transboundary groundfish stocks that migrate into Canadian waters; and have implications relative to the Endangered Species Act.

The council urges the House to pass the legislation in a timely manner. The interim authority provided the States expires October 1, 1999. In the absence of legislation, the council will need to begin the time-consuming task of developing a Federal plan to avoid a lapse in the needed management authority in the Exclusive Economic Zone. Thank you, Mr. Chairman.

[The prepared statement of Mr. Anderson may be found at end of hearing.]

Mr. SAXTON. Thank you, sir. Mr. Fisher.

STATEMENT OF RANDY FISHER, EXECUTIVE DIRECTOR, PACIFIC STATES MARINE FISHERIES COMMISSION

Mr. FISHER. Thank you, Mr. Chairman, and good morning. My name is Randy Fisher. I am the executive director of the Pacific States Marine Fisheries Commission. The commission was chartered by Congress in 1947. The compact signed by the States of Alaska, Washington, Oregon, California, and Idaho has the goal of supporting policies and actions directed at the conservation, development, and management of fishery resources of mutual concern to the member States. Consistent with that direction, I am here representing the commission and, specifically, the Washington Department of Fish and Wildlife, the Oregon Department of Fish and Wildlife, and the California Department of Fish and Game.

Landing of Dungeness crab in the coastal fisheries of California, Oregon, and Washington have been maintained a cyclic pattern for

nearly 50 seasons. Harvest has ranged between 8 million and 54 million pounds, and peak approximately every 10 years. During the most recent 10 seasons, coastwide landings averaged 33.8 million pounds, of which 28 percent were landed in California, 31 percent were landed in Oregon, and 41 percent were landed in Washington. The total annual ex-vessel value of the coastwide fishery since the 1981–1982 season has ranged between $17 and $70 million.

The total number of vessels landing in each individual State has increased historically, but since the 1981–1982 season, the number of coastwide participants has remained relatively stable, between 952 and 1,302 vessels. In any year, an average of 94 percent of these vessels land in only one State, with only 6 percent landing in two of the three States, and less than 1 percent landing in all three States.

Dungeness crab fisheries in California, Oregon, and Washington are managed under the regimen known as the "3-S," size, sex, and season. Only male Dungeness crabs are harvested commercially. State managers do not make pre-season forecasts of stock abundance, and harvest levels are based on recruitment into acceptable harvest categories.

The basic management structure has been stable over time. All three States standardized methods of measurements in the mid-1960's. Season opening dates have generally maintained the same since the last 1960's.

Although the regulations governing the fisheries are adopted by independent administrative processes in each State, they are generally consistent. An interstate Memorandum of Understanding, first signed in 1980, committed the State management agencies to take mutually supportive crab management actions.

I mention this background to illustrate the long history of the cooperative nature of crab management between the States.

In 1990, at the request of the crab industry, the Pacific States Marine Fisheries Commission formed the Tri-State Dungeness Crab Committee. There are currently 19 members on that committee, representing Dungeness crab fishermen and processors from the Pacific Coast. The committee was designed to have representation from the entire coast. All recommendations of the committee are based on consensus of its members. The committee itself is only advisory body; its recommendations can be implemented only through the separate regulatory procedures established in each of the member States.

In 1993, the Pacific States Marine Fisheries Commission was asked to survey the crab fleet and assess the support for limited entry among vessel owners. Based on the results of the survey, the Tri-State Dungeness Crab Committee participants sponsored independent crab licensing limitation efforts in their home States. These programs became effective in 1995 and the 1995–1996 crab season was the first in which all coastal crab fisheries operated license limitation.

The Pacific Fishery Management Council considered and declined to develop a fishery management plan for Dungeness crab in the late 1970's, suggesting that the States were adequately managing the resource. In April 1995, the State of Washington requested that the Pacific Fishery Management Council again consider a Fed-

eral FMP for Dungeness crab. Washington later suspended its request pending the outcome of an attempt to amend the Magnuson-Stevens Fishery Conservation and Management Act.

That authority allowed the States to apply regulations that opened and closed seasons, set minimum size and crab meat rates, and implemented treaty Indian harvest requirements, using area closures, port limitations to all vessels fishing in the adjacent Federal EEZ. State programs limiting entry to the fisheries were specifically excluded from this extended authority.

September, 1997, after a review by an ad-hoc panel and the Tri-State Dungeness Crab Committee, the council voted unanimously to request that the expanded Interim Authority be made permanent. This request is not precedent-setting since Congress and the National Marine Fisheries Service accepted similar State management of king crab fisheries in the Gulf of Alaska. This legislation does allow anyone who has an appropriate permit in California, Oregon, or Washington, to fish in the EEZ. This is a coordinated management approach that reflects a long history of State Dungeness crab management between California, Oregon, and Washington.

This legislation represents a negotiated settlement between the States and is favored by the vast majority of fishermen, processors, tribes, the Pacific Marine Fisheries Management Commission, and the Pacific Fisheries Management Council. The Pacific Fisheries Management Commission strongly recommends that this legislation be passed and drafted this year. Thank you very much.

[The prepared statement of Mr. Fisher may be found at end of hearing.]

Mr. SAXTON. Thank you very much. I appreciate all of your very fine and articulate testimony.

Let me ask you an unusual question. We—Mr. Pallone, Mr. Miller, and I—deal here weekly, sometimes on a daily basis, with fisheries management issues, with NMFS and the Councils, et cetera, et cetera. And it occurs to me, as I begin to learn about this issue, that there are two fisheries which have been remarkably successful in terms of our conservation and utilization efforts. One happens to be the Dungeness crab and the other happens to be the Atlantic striped bass. And, in both cases, in each case, the major conservation and management role is carried out by the States rather than by those of us who are responsible for fisheries management on the Federal level in cooperation with NMFS, et cetera.

Is there some kind of a message here that we might take note of? I understand that the folks from Oregon, Washington, and California are happy. I understand the Indian tribes are happy. I understand the crabs are all smiling.

[Laughter.]

It's a great success story, seems like. And, yet, we have a hard time finding success stories in fishery management and we've got one on the east coast that Mr. Pallone and I are very fond of and we've got, apparently now, one on the west coast that Mr. Miller's fond of and I just—Mr. Evans, is there a message here or am I reading more into this than I should?

Mr. EVANS. I'd like to suggest that you're reading a little bit more into it than you should. But I think that there is a message in that we do believe, and there are other fisheries where this is

the case, that the fishery ought to be managed in the waters or under the jurisdiction where it's primarily pursued. And, as you know, striped bass is pursued largely in coastal waters on the east coast. Dungeness crab fishery is pursued, principally, in State waters on the west coast.

There are a number of mechanisms around the country. They differ in different parts of the country as to how to effect that management. We have the Atlantic Coastal Act on the east coast that specifically sets up a framework for cooperative State programs to manage fisheries. We don't have an analogous piece of legislation on the west coast, it turns out, so the Pacific Commission operates in a slightly different fashion.

In principle, I think that managing the fisheries where they're pursued is a sensible procedure and I don't think that there's a message there. Sometimes the questions become a little more complicated when they're out on the EEZ and there are jurisdictional issues associated with it.

Mr. ANDERSON. Mr. Chairman, may I respond to your question also? Thank you.

While I do represent—I work for the Washington Department of Fish and Wildlife, I'm here on behalf of the council today. But I want to say that, in the Pacific Fishery Management Council forum, there is a strong partnership between National Marine Fishery Service and the State agencies and developing the management plans for species that are covered under Federal fishery management plans. I think the State agencies, certainly our State agencies, both share the responsibility with National Marine Fishery Service or the successes as well as the failures that may have occurred in management of the species that are under Federal FMPs. It is a partnership. We both—we share the responsibility for the management of those fisheries.

Mr. SAXTON. Thank you. Does the management plan, this very successful management plan, does it require—is it required in any way to be consistent with Magnuson-Stevenson Act's national standards? There are some 10 stated standards which are referred to in Section 301 of the Act, called National Standards for Fishery and Conservation Management. Is the management plan consistent with these standards or do you have a separate set of standards in the management plan that are prescribed separately? Or how do you work with regard to guidelines and standards?

Mr. ANDERSON. We have fishery management objectives that are described in our State/tribal management plans for preserving and protecting and conserving the resource. We have, under State statute, a requirement to balance the needs of the recreational and commercial fishing interests in this fishery as well as other fisheries that the State manages. I'd like to think that the national standards are standards that we need and should have in mind in the application of all our fishery management initiatives, whether they be under State authority or under a Federal authority. So, while I would stop short of saying that we look at the national standards when developing our fishery management plan for Dungeness crab, I'm well aware and familiar with what those standards are and, generally, believe that our management complies with those standards.

Mr. SAXTON. Let me ask you just one specific question about the standards. A standard, which is No. 2 in this section, reads, "Conservation and management measures shall be based upon the best scientific information available." Would you say that you comply with that requirement?

Mr. ANDERSON. I am very confident that all three States comply with that national standard in managing this fishery.

Mr. SAXTON. Thank you very much. Mr. Miller.

Mr. MILLER. You want me to—just a couple of quick questions here. Thank you very much for your testimony and for your support of this legislation. I may have heard the same message that the chairman heard and that was sort of, you're all very polite, telling us to keep our nose out of your business, but——

[Laughter.]

It seems to be working, so we'll probably take the recommendation, as we have in this legislation. With respect to the Indian tribes, once the take is determined and their share of that is determined, with respect to the rest of the operations of the fisheries, they operate the same as everyone else in that fishery in terms of season and in terms of whatever other restraints you have on the crab fishery? Is that accurate or not accurate?

Mr. ANDERSON. If I understand your question, it's not accurate. First of all, we do not have the technology to make a pre-season estimate of the harvestable abundance of crab. So we have to manage the fishery based on time and area, which equates into opportunity. And so we de—we have devised a management regime that have used those time, area—time and area basically are the two mechanisms we've used to provide equal opportunity to both the tribal and the non-treaty fishers for accessing the harvestable numbers of crab in any given year.

Mr. MILLER. But the rules under which they then fish when you set out the season over an area or a time, time and area, everybody fishes in the same fashion?

Mr. ANDERSON. The conservation rules are the same, in terms of the gear specifications, however we do set aside specific areas for a portion of the time that the non-Indian fishery is open that is for the exclusive use of the tribal fishery.

Mr. MILLER. All right.

Mr. ANDERSON. So, in that way there's—to balance——

Mr. MILLER. But that's to try to make sure that you comply with the court decision—with the entitlement that's there in terms of amount?

Mr. ANDERSON. Yes, sir.

Mr. MILLER. Yes.

Mr. ANDERSON. That's correct.

Mr. MILLER. But, with respect to conservation and all the rest of it, the——

Mr. ANDERSON. The rules are the same. Yes.

Mr. MILLER. [continuing] the rules are the same. OK. I appreciate that. Given what's going on with the salmon, with the groundfish, and the council's burdens and activities there, you can't manage this at the same time? I mean, in terms of what you see as your resource allocation here, this is——?

Mr. ANDERSON. I think that what the council is saying is that, for species such as salmon and groundfish and coastal pelagics, which have a lot of interjurisdictional issues wrapped up in them, that's where we need to focus our fiscal and——

Mr. MILLER. So you're comfortable laying this off on the——

Mr. ANDERSON. [continuing] resources. And so that's why we believe, rather than take away from those efforts and apply a portion of those resources to managing Dungeness crab, we don't think that's a good use of Federal dollars. We believe that the Federal dollars that are——

Mr. MILLER. OK.

Mr. ANDERSON. [continuing] provided to the council are better used in those areas that have more interjurisdictional implications.

Mr. MILLER. Thank you. Thank you, Mr. Chairman.

Mr. SAXTON. Thank you, Mr. Miller. As you may have heard, we are being called for a vote and so at this time I'll just say that we appreciate very much your being here. And Mr. Miller and I will go off and vote and, while we're gone, if the second panel would like to take their places.

Let me just introduce them before we leave. We have Mr. Nick Furman, executive director of the Oregon Dungeness Crab Commission; Mr. Larry Thevik—is that pronounced correctly?—representing the Washington Dungeness Crab Fishermen's Association and the Columbia River Crab Fishermen's Association; and Mr. Pietro Parravo—Parravano, president of the Pacific Coast Federation of Fishermen's Associations; oh, and Mr.—this guy with the funny-looking tie, there in the back of the room—Mr. Rod Moore, executive director of the West Coast Seafood Processors Association. Thank you. We'll hurry back.

[Recess.]

Mr. SAXTON. If the witnesses could find their—might find their places.

Mr. Parravano, let me, first of all, apologize for not having scoped out your name before I tried to read it. I am sorry. It is time for us to begin. Mr. Miller will be back with us in just a moment. I assume that you won't mind beginning before he gets back. So if you would like to start, Mr. Furman.

STATEMENT OF NICK FURMAN, EXECUTIVE DIRECTOR, OREGON DUNGENESS CRAB COMMISSION

Mr. FURMAN. Thank you, Mr. Chairman, members of the Committee. My name is Nick Furman. I'm the executive director of the Oregon Dungeness Crab Commission. The ODCC is a fishermen-funded commodity commission which operates under the umbrella of the Oregon Department of Agriculture. The commission is comprised of seven industry members, appointed by the ODA director, to represent the commercial crab fleets in all of the major ports along the Oregon coast. Five seats are held by crabbers and two positions are filled by processors. Collectively, the commissioners represent 450 Oregon Dungeness crab permit holders, and it on their behalf that I offer the following.

With the exception of a brief foray into Oregon's limited entry debate some years back, the commission has historically stayed true to its primary mission which is to enhance the image and profit-

ability of the Dungeness crab industry through market development and promotion. I mention this only to underscore how concerned the present members of the commission are over the future of the crab fishery as it relates to the legislation before you and how convinced they are that H.R. 3498 is in the best interests of their constituents as well as the entire crab industry.

The west coast Dungeness crab fishery is one of the soundest fisheries in the nation, with an enviable track record dating back to the late 1800's. Albeit cyclical, the stocks are healthy and well-managed. Only mature male crabs meeting specific size regulations are landed. Female crabs and sub-legal males are left in the ocean to reproduce, ensuring adequate recruitment for subsequent years. Fishing activity ceases during the period of post-molt vulnerability in the late summer and fall to minimize handling mortality. The harvest method is targeted and the gear employed is selective. By-catch, a problem facing so many other fisheries, is not an issue with respect to the crab fishery. In short, there are no compelling conservation or biological reasons to alter the fishery's present form of state management.

In 1996, Congress amended the Magnuson-Stevens Act, giving the States of Oregon, Washington, and California interim authority to manage the Dungeness crab fishery occurring within the Exclusive Economic Zone adjacent to their respective State waters. The same simple, but highly successful management methods that have served the fishery well for decades, were expanded into Federal waters off of each State. During that period, the States have demonstrated the ability and willingness to work together in solving management-related issues associated with the fishery, with memorandums of agreement in place to deal with specific items such as soft-shell testing, delayed openers, and reciprocity. Regulations are, for the most part, consistent between the three Sates.

A Tri-State Dungeness Crab Committee exists under the auspices of the Pacific States Marine Fisheries Commission and is recognized as a legitimate forum to discuss and resolve the socio-economic issues facing the crab industry coastwide. Recent limited entry legislation adopted in all three States has curtailed the access to the crab fishery by putting a cap on the number of available permits, thereby ensuring that fleet size will remain the same and that the ranks will not swell beyond current numbers. In short, there are no compelling management reasons to warrant the adoption of a Federal fisheries management plan at this juncture.

While differences admittedly exist between the fleets and fishermen of the three States, all agree that extended State management within the EEZ is the best way to address those issues by assuring that regulatory authority will be consistent and, at the same time, sensitive to specific regional needs.

H.R. 3498 represents two years worth of negotiations by representatives of the entire west coast crab industry, in which all parties put aside their parochial interests in an effort to preserve the traditional and historic nature of the Dungeness crab fishery, while at the same time ensuring that future considerations can be met in a responsible and cohesive manner. It has the support of an overwhelming majority of the fishing industry, the tribal interests, the associated State agencies, and the Pacific Fisheries Manage-

ment Council itself, who's jurisdiction the crab fishery would come under, should efforts to pass this legislation fail. In short, there is virtually no opposition to this bill from any party with a legitimate vested interest in the Dungeness crab fishery.

In the late 1970's, the PFMC began working on an FMP for Dungeness crab, only to abandon the effort after concluding that it would serve no purpose at that time. Nothing has changed. If anything, the role of State management within the crab fishery has only improved since then, with the adoption of limited entry programs and enhanced interstate cooperation. Recently, the Pacific Council itself voted unanimously in favor of a legislative response to the suggestion that it revisit the FMP process for Dungeness crab.

FMPs are complex, cumbersome, and costly. The Dungeness crab fishery is quite simple. It will not benefit from the data generated to complete an FMP, nor will it be any better off under the management authority of a fisheries council. The money needed to develop and implement a fisheries management plan for Dungeness crab would be far better off spent addressing the crucial issues facing other west coast fisheries that do need the help. In short, if it's not broken, don't fix it.

Over the past year, the Dungeness Crab Commission has given members of the Oregon fleet numerous opportunities to comment on the Commission's position on this issue and its role in the attempt to get the resulting legislation passed. Not once have they received anything less than wholehearted support and encouragement. Anybody familiar with our crab fleet can appreciate how unusual that unanimity is.

The commission is convinced that H.R. 3498 is a good bill, that it reflect the desires of the majority of the west coast crab industry, and that the resource and those who depend on it will be better off in the event of its successful passage. We thank you for the opportunity to speak on behalf of the Crab Commission and Oregon's 450 crab permit holders in support of this legislation.

[The prepared statement of Mr. Furman may be found at end of hearing.]

Mr. SAXTON. Thank you very much, Mr. Furman.

Mr. Thevik.

STATEMENT OF LARRY THEVIK, WASHINGTON DUNGENESS CRAB FISHERMEN'S ASSOCIATION/COLUMBIA RIVER CRAB FISHERMEN'S ASSOCIATION

Mr. THEVIK. Mr. Chairman, members of the Committee, good morning. Is it still morning? It is. My name is Larry Thevik. I am speaking on behalf of the Washington Dungeness Crab Fishermen's Association and the Columbia River Crab Fishermen's Association. I want to thank Congressman Miller and the cosponsors who introduced H.R. 3498. I also want to thank the Committee for inviting me to testify in support of this legislation, authorizing the States of Washington, Oregon, and California to regulate Dungeness crab in the Exclusive Economic Zone. This is extremely important and welcome legislation for crab fishers and for the coastal communities where we work and live.

For 27 years, I have participated in a number of west coast fisheries. Crab fishing has been my primary source of income. I have fished for crab in Washington and Oregon. The west coast Dungeness crab fishery occurs off the coasts of Washington, Oregon, and California. The directed pot fishery has almost no bycatch. The primary management tools are size, sex, and season. Crab are not considered a highly migratory species. The fishery is confined to the eastern one-fifth of the EEZ and to State waters. The largest extension of the fishery into the EEZ occurs off of Washington where the edge of the continental shelf extends just under 40 miles westward of the shoreline. The amount of crab caught in the EEZ varies between the States and from year to year.

The Dungeness crab fishery has been managed by the States for decades. The States have coordinated effort on many issues through the Pacific States Marine Fish Commission's Tri-State Crab Committee. In 1979, the Pacific Fisheries Management Council considered the need for the development of a Federal management plan for crab and decided that existing State management met conservation and management goals. State management has worked well.

While the States have done a good job, the underlying problems resulting from their lack of management authority in waters beyond three miles have intensified. Expanding fishing effort in deeper waters, increasing harvest rates, and Federal court orders in 1995 on tribal shellfish treaty rights have forced a renewed look at the need for management authority in the EEZ.

Except for each State's limited entry laws, H.R. 3498 will provide consistent regulations and authority within three miles and outside three miles off each State. Enforcement issues will be clear. Safety issues and overcapitalization can be addressed. And the burden of court-required tribal harvests can be fairly implemented. Without consistent regulatory authority, Washington-licensed vessels would bear the burden of tribal allocation while vessels from other States would not be similarly restricted.

Congress granted limited interim authority in 1996 to provide short-term management protection while the west coast considered a more permanent solution. We are grateful for that relief and ask again for your help. Representatives from all segments of the industry and regional, State, tribal, and Federal representatives have voiced support for this legislative solution. H.R. 3498 is not the unilateral action of one State at the expense of another. H.R. 3498 does not dismantle an existing Federal plan, nor does it preclude development of a Federal management plan for crab should it become necessary. This legislation has the unanimous support of the Pacific Fisheries Management Council and is the result of a considered and inclusive Federal council process to decide upon a regional course of action. H.R. 3498 provides additional tools necessary to manage the west coast Dungeness crab fishery without overturning the fundamental management regimes that have worked well in the past and can, with your help, work well into the future.

Both the Washington Dungeness Crab Fishermen's Association and the Columbia River Crab Fishermen's Association appreciate your consideration of this legislation. Most Washington crabbers rely on crab for the majority of their fishing income. We depend on

a sustainable fishery. We support effective management to ensure resource health and economic viability. Our organizations believe this legislation will help us accomplish the management tasks needed for this fishery. We are hopeful H.R. 3498 will be approved by this Committee and moved on for timely passage. Thank you.

[The prepared statement of Mr. Thevik may be found at end of hearing.]

Mr. SAXTON. Thank you very much, sir.

Mr. Parravano.

STATEMENT OF PIETRO PARRAVANO, PRESIDENT, PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS

Mr. PARRAVANO. Thank you, Mr. Chairman. I'd like to say I appreciate your apology. And I'd also like to say that I was born in Princeton; I have very fond memories of living in the beautiful city in your beautiful state.

Good morning, Mr. Chairman and members of the Subcommittee. My name is Pietro Parravano and I'm president of the Pacific Coast Federation of Fishermen's Associations, located in San Francisco. We represent working men and women in the west coast commercial fishing fleet. PCFF of A is the largest commercial fishermen's group on the west coast and represents, among others, the majority of California Dungeness crab fishermen.

I wish to thank you for agreeing to hold this hearing on this legislation of great importance to us on the west and thank Mr. Young and Mr. Miller for introducing H.R. 3498. I have been a Dungeness crab fisherman since 1982, operating out of the California port of Half Moon Bay. It is from the perspective of a California commercial crab fishermen that I present these remarks today.

It is important to briefly review the history of this fishery and its management so that we can explain why we support H.R. 3498. Following passage of the Fishery Conservation and Management Act in 1976, a number of west coast fisheries were considered for Federal FMPs, including Dungeness crab. After the establishment of a Crab Advisory Subpanel and over a year of consideration by the Pacific Fishery Management Council, it was decided a Federal plan for the crab fishery was not necessary. There were other fisheries needing more attention, such as salmon and groundfish, and there was good State regulation and cooperation among the States on the management of the crab fishery. Thus, there was no compelling need for Federal management.

Recent changes, and, undoubtedly, there will be more to come, in the Dungeness crab fishery now warrant specific management authority for the Dungeness crab fishery in Federal waters. But before to a conclusion as to which crab management plan is best, it is important to answer the following questions.

One: Are the States capable of managing the fishery within the EEZ? The answer is yes. The fact is that the States have been managing their own vessels and fishermen in the past, harvesting Dungeness crab in the EEZ. It is only the vessels that are not registered by the State that a State has no authority over. It is now possible, for example, for a large vessel to come from the north, operated with 1,000 or more traps, in the EEZ, ignore State conservation measures, and then unload its catch in another State. This, of

course, can be remedied by delegating to the State's management authority over this fishery in the EEZ.

Question two: Are there conflicts between the States that require Federal management of this fishery? The answer is no. As mentioned above, there is a long history of cooperation and coordination by the three States in the research and management of the Dungeness crab fishery. A Federal FMP would do nothing to improve upon the current level of coordination and cooperation.

Question three: Will there be confusion about the boundaries if State jurisdiction is extended over the fishery into the EEZ? The answer is no. The political boundaries of the three west coast [sic] are such that it is easy to draw lines westward establishing straightforward boundary lines, making clear to fishermen which State authority they are under and making clear to enforcement officials which vessels operating within the EEZ they do and do not have jurisdiction over at any given time.

Question four: Will a Federal fishery management plan for crab require additional Federal expenditures? The answer is yes. The preparation of fishery management plans costs hundreds of thousands of dollars and most require annual updates. In addition to the regional council costs, there are also costs involved for the National Marine Fisheries Service administrating an FMP. With the current lack of adequate funds for such things as groundfish research, the restoration of salmon habitat, where are the funds to come from for the preparation of a Dungeness crab FMP? There is also a question of staff time. With plans afoot for a coastal pelagic and, perhaps, a highly migratory species FMP, where is the additional staff for the Pacific Council and NMFS to come from?

At the same time, State management of the Dungeness crab fishery is not costing the Federal treasury, is not costing the Federal treasury anything. The States are picking up the cost and much of that is being paid for by industry through landing taxes and permit fees.

Question five: Is there precedent for delegating to States management of a fishery within the EEZ. The answer is yes. The State of Alaska has management authority over the crab fishery in the EEZ in the Gulf of Alaska.

Mr. Chairman, I believe the facts are clear. There needs to be management authority over the Dungeness crab fishery in the Federal EEZ and it is the three States that are best suited to take on that authority. Certainly when Congress passed the Fishery Conservation and Management Act in 1976, what we call now the Magnuson-Stevens Act, it did not intend to create a one-size-fits-all type of management for our fisheries. It did not seek to throw out a Federal system that provides for diversity and experimentation.

We strongly urge the support of the Subcommittee and the full House Resources Committee of H.R. 3498 and, for the sake of the west coast Dungeness crab resource, its multi-million dollars Dungeness crab fishery, and for persons, such as myself, who derive income from this fishery and who enjoy providing consumers the very best in seafood. Thank you.

[The prepared statement of Mr. Parravano may be found at end of hearing.]

Mr. SAXTON. Thank you very much, Mr. Parravano. Mr. Moore.

STATEMENT OF ROD MOORE, EXECUTIVE DIRECTOR, WEST COAST SEAFOOD PROCESSORS ASSOCIATION

Mr. MOORE. Thank you, Mr. Chairman, for the second week in a row taking an interest in West Coast fisheries issues. Glad to see your expanded interest. It's always——

Mr. SAXTON. Your ties get funnier every week.

[Laughter.]

Mr. MOORE. I do this to keep you awake so my testimony won't bore you. And also——

Mr. SAXTON. I'm sure it won't bore me.

[Laughter.]

Mr. MOORE. And I also want to thank Mr. Miller for taking the lead in introducing this bill and keeping it moving and all the hard work his staff has put into this. It's really appreciated, as you can hear from the testimony today. This is something that you've got a lot of people behind. And we really appreciate the efforts that have been done on this.

Now it's not often that you get to see a bipartisan piece of legislation that reduces bureaucracy, saves the taxpayers money, conserves a major fishery, and is supported by all the affected parties. Well, H.R. 3498 is one of those rare occurrences and I hope you're going to recognize that and deal with it appropriately.

Now there's been questions raised about why are we doing this; why are we going through State management? And, frankly, it's not normal for the members of my association to ask to legislative fishery management system outside of the council. The vice president of our association has served on the council. One of our directors currently serves on the council. I'm a member of several council committees as are several others of my members.

But, as you've seen and heard, the crab situation is unique. We've successfully conserved and managed this fishery by State action, with the participation of the industry, and, with this bill, we're accommodating tribal interests, we're taking care of the final steps in management, and we think doing something that is positive for the resource and for the country, doing something that's going to allow the council to get about its other business which, as we discussed last week on groundfish, they're having enough trouble doing. Now we've got a good system here and we would like to keep it working.

The only gap that's occurred in this success story is the fact that, because we have a mobile fleet that moves up and down the coast and the fact that we do need to take care of tribal interests, we need to make sure that the State authorities to conserve the resource fully extend out to 200 miles so that we don't have a situation where you're going to wind up with overfishing or you're going to wind up with a problem. And, by providing the States with the authority to go out to 200 miles, as this bill does, we ensure that everybody plays by the same rules and we maintain our treaty obligations and we ensure conservation.

Mr. Pallone earlier raised questions about precedents. In my written testimony I've laid out several examples of precedents that have been taken both by the Congress and by NMFS in providing similar State authority. Striped bass is certainly one of them, as you mentioned, Mr. Chairman. You know, here you had a fishery

that everything's been done by the States and it's keeping the resource in good shape and we're, in a way, trying to follow the same example that you've seen on your coast. We're not trying to go around the council. The bill says quite clearly that, if this management system doesn't work, the council has the full authority to go in and develop a fishery management plan. The council itself looked at the issue and said, hey, you know, the legislative approach of extending the State's authority is really the best way to do it.

Last week when we were here talking about groundfish, I talked about how the industry tends to be innovative in dealing with problems. And the same is true here. You know, we're trying to follow an innovative approach to take care of a unique situation and I was very, very pleased to hear this morning that the National Marine Fisheries Service also agrees with this.

And, you know, quite frankly, this whole system is going to depend on us. We're part of the management system at this point and if we screw up, it's going to be our own fault. And then we're all going to wind up going back to the council and saying, OK, we were wrong, we'll do it the other way. But we don't think that's going to happen. We think we're going to do it right, as we have been in the past, and we appreciate your support and hope you take quick action on this bill. Thank you, Mr. Chairman, Mr. Miller.

[The prepared statement of Mr. Moore may be found at end of hearing.]

Mr. SAXTON. Thank you very much. Just to satisfy my curiosity, the fishery obviously is an inshore fishery as well as an EEZ fishery, is that correct? And, obviously, the State has the authority to manage a fishery inside three miles, and has done so effectively. That correct?

Mr. MOORE. That's correct. They also have the authority, under the Magnuson Act, to manage their own vessels out—within the EEZ.

Mr. SAXTON. And what is the method of—is this a crab pot fishery?

Mr. MOORE. Yes, sir.

Mr. SAXTON. And this species does as well in must be relatively deep waters as it does in relatively shallow water, is that correct?

Mr. MOORE. I would defer to one of the guys who's out there harvesting them all the time to probably answer that a little bit better.

Mr. THEVIK. They range, basically, from the shoreline and the estuaries along our Pacific coast out to the edge of the continental shelf, which is approximately 100 to 120 fathoms where it breaks down into the much deeper waters.

Mr. SAXTON. Are the fishing practices—it would seem as though the inshore areas would be more easily fished than the areas further offshore. Is that true?

Mr. THEVIK. I think it's safe to say that the greatest amount of fishing effort occurs closer to the shoreline, but not necessarily——

Mr. SAXTON. Within State waters?

Mr. THEVIK. Well, it varies between States, depending on weather conditions, time of year, how shallow it is. In the State of Washington, three miles is only about 10 fathoms deep. In other States, it could be 30, 40 fathoms deep. So there's a variability between

States as to how close that fishing effort, the primary effort is, to the shoreline or how close it is to the shelf.

Mr. SAXTON. And the annual catch, with regard to the annual catch, has it been stable?

Mr. THEVIK. One of the characteristics of this fishery seems to be—when I say that, we've been looking at it for several decades—is it's cyclical. So, no, that the harvest amounts, year to year, can vary considerably. I believe the average in Washington, though, over 10 to 15 years is between 8 to 9 million pounds with a low of 2.5 million in 1985 and a high of around 22 million, I believe, in 1989.

Mr. SAXTON. And you're obviously convinced that the fishery biomass is over the long haul been stable?

Mr. THEVIK. What I'm fairly convinced of is that the conservation measures that are built into this fishery allow for a sustainable biomass. I wouldn't say that the biomass has been the same over time, but the conservation measures have been sufficient to support a sustainable fishery.

Mr. FURMAN. Mr. Chairman, may I comment?

Mr. SAXTON. Sure.

Mr. FURMAN. In Oregon we have landing records that go back to approximately 1889 for the Dungeness crab fishery and two years ago we had our second-best harvest on record, which I think illustrates the fact that, although it is cyclical, that the stocks, the present stocks, are quite healthy.

Mr. SAXTON. You're convinced that present stocks are in no way endangered and that is, at least partly, due to the management plans that you have cooperatively adopted?

Mr. FURMAN. Correct.

Mr. SAXTON. If H.R. 3498 is not passed, how will the industry sectors be affected?

Mr. THEVIK. Well, for one, the congressional authority will expire in 1999 and we'll be back where we were prior to the granting of that, which means, especially in Washington, anyway, and that's who I'm speaking for fundamentally, the management measures that would need to be taken to accommodate tribal allocations would not be consistently applied outside of three miles to the fishers that fish off the coast, if they are non-residents or non-licensed fishers by the State of Washington. So we would be regulated to accommodate tribes; out-of-State vessels would not. That's one of the primary things that would happen. And we wouldn't have the management tools to go ahead and deal with some of the other issues that have come up over time: overcapitalization enforcement and safety.

Mr. SAXTON. And Mr. Moore?

Mr. MOORE. I was just going to say that, from the processing sector, what'll wind up happening is we'll have to go back into the fishery management plan mode and work with the council process, which is a long and sometimes arduous and certainly costly process. And, unfortunately, there are times when allocation issues wind up creeping in amongst all the good conservation goals. Right now we've got the allocation issues resolved. You know, we—I think all four of us were fighting each other two years ago on some of these issues and now we're here at the same table holding hands

and saying, please do this. We've got our issues resolved and we want to move forward on this.

Mr. SAXTON. Thank you. Would the industry support a requirement that the States manage the Dungeness crab fishery consistent with national standards as set forth in the Magnuson-Stevens Act?

Mr. MOORE. You asked that question or a similar question earlier of Phil Anderson and I was looking through the national standards. Between this bill and what the States already have in existence—and there are various State laws and regulations—everything except possibly the safety of life at sea really is covered either under this bill or under the State regulations. I think they would be concerned if you imposed a requirement that the individual State laws would somehow have to follow the national standard guidelines that are put out by NMFS because you're dealing with two separate—well, in this case, there'd be four separate sets of management entities: the three States plus the National Marine Fisheries Service. And the national standard guidelines as applied to fishery management plans, as you know, Mr. Chairman, have been somewhat contentious in their interpretation by the National Marine Fisheries Service. So I think the States themselves would probably have a little bit of concern saying, Hey, wait a minute. A bunch of Federal regulations that apply to Federal fishery management plans suddenly being imposed on our State lawmaking process. Now we'd have a little bit of discomfort with that.

But in terms of the——

Mr. SAXTON. Sounds like it's more the principle of the thing then it is the——

Mr. MOORE. The principles are all being followed. They're all being followed already. And, as Phil indicated, you know, they're good principles that everybody should follow all the time anyway.

Mr. SAXTON. Thank you. Mr. Miller.

Mr. MILLER. Thank you, Mr. Chairman. Do the States have different regulations on size of vessels or numbers of pots, from State to State?

Mr. THEVIK. Right now, there is no limitation that I'm aware of on the number of pots. That's one of the next steps in our management process.

Mr. MILLER. So you can fish the number of pots that your vessel can hold?

Mr. THEVIK. Basically yes. There is a limitation on the—an upper limit on the size of vessels that can participate in the fishery. I believe it's 99 feet and I think that's consistent across all three States. It is in Oregon and Washington, anyway. I'm not sure about California.

Mr. PARRAVANO. Yes. In California there are no trap limits. You can fish as many traps as you want and I don't believe there's a size vessel limit because I believe I have seen vessels of over 110 feet.

Mr. MILLER. Yes, but the—you don't think in California there is a size limit?

Mr. PARRAVANO. Not for vessels. I'm not aware of that.

Mr. MOORE. Mr. Miller, the pot limit issue is one that really has been considered in all three States on the part of the industry and,

you know, there are some allocation issues between larger vessels and small vessels, obviously, that are involved in that. But it's something that's kind of out there and I think it's probably going to continue to come up and be debated and each State try to work out the best waty to make sure that you don't have a problem going on out there with the number of pots.

Mr. MILLER. Mr. Parravano, you suggest that the fishery is changing in that respect, right? That you're seeing the entry of larger vessels with more pots who can tank their catch. What's that going to mean, over the long haul? I assume that's a more capital-intensive operation.

Mr. PARRAVANO. It is and I think we're seeing the whole face of the fisheries change, that there are vessels that are now being retired from their current operations due to various conservation measures and these vessels would be capable of getting into the crab fishery and would be operating many, many more traps that we are not seeing in the fishery right now. What that ultimately would do would—it would affect the communities that support the traditional fisherman, that have been operating for 30, 40 years out of their own home ports and it most likely would have a negative effect on the coastal communities that have supported traditional fisheries.

Mr. MILLER. Well, that's a very real concern of mine. I sort of view these traditional fishermen as independent business people and small business people, in some instances, although it seems like when you look at some of the debt it looks like pretty big business. But currently limitations really don't exist in terms of trying to hold onto the number of fishers that participate in this.

Mr. THEVIK. There is limited entry that has——

Mr. MILLER. There's limited entry but you can gain entry for a very large vessel and an unlimited number of pots and——

Mr. THEVIK. Not in Oregon and Washington, you couldn't license a vessel over 99 feet. You also—there are restrictions on transfers. You can only jump up a vessel size about 10 feet at a time in a limited number of years. And what is fundamental to this legislation and one of our reasons to support it is really we couldn't move ahead with any additional restrictions without the authority to regulate consistently outside the State. So this legislation will give us the tools to go ahead and do some of those things.

Mr. MILLER. Well, I would hope that that would be considered. I mean, we don't have to go into all the arguments here this morning but, obviously, to the extent to which this can be a sustainable resource and also a sustainable economic resource for these communities, I think we're all enriched, speaking in the San Francisco Bay Area in Northern California, from having the existence of these fisheries and I would hate to think that at some point, you know, we're reduced to the tourists looking at the boats at Fisherman's Wharf that do not reflect what's going on out there on the high seas, where there might be a couple of people that are left, fishing thousands of pots at some point to the detriment of independent people who have fished this or want to fish it in the future. But I know the perils of this argument.

But I just think that it's important to notr that in our State, and our local economies, fishing communities now have greater attrac-

tion than just as fishing communities. Instead, with so many people on the move and a growing tourism industry. They have become a tourist attraction. But we'd rather have real fishing communities as opposed to tourist destinations. And so I would hope that, if this legislation does provide you the authority to consider ways to protect fishing communities, that we consider it sooner rather than later.

Because we all know what later means. Later means you got this thing split into two groups and then we're into all of the lobbying that goes on that has nothing to really do with the merits of what you're trying to do. So I would hope that that would happen as a result of this. Thank you.

Mr. SAXTON. Thank you very much. We'd just like to thank you at this point for coming all the way from the west coast to share your thoughts with us. And you will be pleased to know that we are tentatively thinking of a mark-up date in early June and so we hope to do our part to move this issue forward at a relatively early date. Thank you again for being here.

[The prepared statement of Mr. Young follows:]

STATEMENT OF HON. DON YOUNG, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALASKA

Mr. Chairman, I am pleased that you are conducting this hearing today on this important piece of legislation.

The original Magnuson-Stevens Fishery Conservation and Management Act created eight regional fishery management councils. These regional councils were given management and conservation authority over marine fishery resources in the Federal Exclusive Economic Zone. The regional councils are responsible for developing and implementing fishery management plans for the marine species under their jurisdiction.

While I have always been a strong advocate of the regional councils, there are many fisheries that are not covered by a Council-developed fishery management plan. In some instances where the majority of the fishery is within State waters, States have taken the conservation and management of these fisheries upon themselves. For nearly 40 years, this has been the case with the Dungeness crab fishery.

The States of Washington, Oregon, and California have cooperatively managed the Dungeness crab fishery since the 1960's. This cooperative management worked well until a 1994 Federal court ruling caused concern over whether the States could adequately address the tribal allocations in the Federal Exclusive Economic Zone.

In 1996, Congress authorized limited and interim management authority for the Dungeness crab in the Federal Exclusive Economic Zone to the States of Washington, Oregon, and California. The management authority was temporary in order to give the Council time to develop a management plan to address the concerns of the involved States and tribes before the interim authority expires on October 1, 1999.

After reviewing the various management options, the Pacific Fishery Management Council, which has jurisdiction over the Dungeness crab fishery, unanimously requested that Congress make the interim management authority permanent. Congressman Miller's bill, H.R. 3498, would accomplish that goal.

H.R. 3498 would allow the States of Washington, Oregon, and California to retain management of the Dungeness crab fishery in the Exclusive Economic Zone as long as a Federal fishery management plan is not developed to supersede this authority in the future.

While I don't normally agree with Congressional attempts to step over the Council's authority to manage fisheries, in this case we are not taking management authority away from the Council, because the Council retains the right to develop and implement a fishery management plan at any time. In short, if the need arises, the Pacific Fishery Management Council can act to federalize this valuable fishery.

H.R. 3498 is supported by the Council and all of the constituencies involved in the Dungeness crab fishery. I look forward to discussing the merits of this bill and hearing from our distinguished witnesses.

[The prepared statement of Mr. Beasley may be found at end of hearing.]

Mr. SAXTON. The hearing is adjourned.

[Whereupon, at 12:27 p.m., the Subcommittee adjourned subject to the call of the Chair.]

[Additional material submitted for the record follows.]

STATEMENT OF DR. DAVID EVANS, DEPUTY ASSISTANT ADMINISTRATOR FOR FISHERIES, NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE

Mr. Chairman, thank you for inviting me to testify before the Subcommittee today on Dungeness crab. I am Dr. David Evans, Deputy Assistant Administrator for Fisheries. I am accompanied by William L. Robinson, Assistant Regional Administrator for Sustainable Fisheries in NMFS' Northwest Region.

National Marine Fisheries Service Position on H.R 3498

The National Marine Fisheries Service (NMFS) supports the passage of H.R. 3498, the Dungeness Crab Conservation and Management Act, as a unique solution to an unusual set of circumstances. Before the Federal District Court's 1994 Rafeedie decision, no treaty fishery operated on an ocean species not managed by a Federal Fishery Management Plan (FMP). In the Sustainable Fisheries Act, Congress provided interim authority to the west coast states to regulate all vessels, regardless of state of origin, in Federal waters off each state in the absence of a Federal FMP. Congress also directed the Pacific Fishery Management Council (Pacific Council or Council) to develop a Federal FMP. The Council considered a Federal FMP, but concluded that tribal treaty rights for Dungeness crab can best be met and protected within the long standing tri-state management process.

Section 306 (a)(3)(A) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) recognizes State jurisdiction to manage vessels registered to a state when those vessels are operating outside of state waters, if there is no FMP for the fishery pursued. Further, Section 306 (a)(3)(C) provides authority to the State of Alaska to manage vessels that are not registered with that state when pursuing a fishery for which there was no Federal FMP in place on August 1, 1996, and "the Secretary and the North Pacific Council find that there is a legitimate interest of the State of Alaska in the conservation and management of such fishery."

In its report to Congress, the Pacific Council found that there was a legitimate interest of the three west coast states to continue to retain the management authority that they had exercised over Dungeness crab fisheries for over 60 years, and to extend the interim authority granted by Congress to allow continued tri-state management. NMFS concurs with this finding with the understanding that, if at any time, and for any reason, the Secretary or the Council should determine the need for a Federal Dungeness crab FMP, a Federal FMP could be implemented. At that time, state authority in the EEZ that is not provided for in the plan would be terminated. NMFS believes the current H.R. 3498 language provides for this, but proposes clarifying this authority with language similar to that found at § 306(a)(3)(C) in the Magnuson-Stevens Act, to be added to the end of paragraph 306 (d) of H.R. 3498, in that: "The authority provided under this paragraph shall terminate when a fishery management plan under this Act is approved and implemented for this fishery."

It is clear from Section 306 of the Magnuson-Stevens Act that Congress has recognized that a state's authority extends to its registered fishers when they are participating in a fishery for which there is no Federal FMP. It is also clear from this section that only rare and unusual circumstances would support extension of a state's authority over vessels from other states operating in the EEZ adjacent to that state's waters. NMFS believes that the unique circumstances of (1) tribal treaty obligations, in combination with (2) the long-term, cooperative state-level management that includes effort limitation programs, (3) the current and historic lack of a Federal FMP, (4) the small number of states with jurisdiction over the range of the species, (5) the clear, latitudinal borderlines between the states, and (6) the specific request of the Pacific Council for extension of state authority, merit consideration of extending special state authority over Dungeness crab, as described by H.R. 3498.

Agency support for this bill was based on very careful consideration of the exceptional nature of the management quandaries of this fishery. Agency support is given for this bill with the understanding that Federal management authority may be invoked for Dungeness crab at any time, and with the particular expectation that such authority would be invoked should tri-state management in any way contravene the fishery conservation and management principles of the Magnuson-Stevens Act. Our support for this bill, however, should not be interpreted as anything more than support for this approach, in this fishery, with its unique characteristics.

NMFS recommends that, three years after this legislation is passed, the Council make a Report to Congress that reevaluates the potential need for Federal management and a Federal FMP.

Fishery Background

Evolution Towards Cooperative Management

Dungeness crab *(Cancer magister)* are commercially harvested in nearshore west coast waters from south of San Francisco to the Aleutian Islands. Dungeness crab are an intertidal and continental shelf species, living off the ocean bottom out to about 100 fathoms. The three west coast states—Washington, Oregon, and California—have been setting fishing restrictions, such as allowable crab size and fishing season since the early 20th century.

By the mid-1960s, years of management experience with Dungeness crab fisheries had evolved into the management principles that the three states use today—limiting harvest by size, sex, and season. These principles essentially mean that crabbers may only keep male crabs over a certain size (6.25 inches minimum, measuring shortest distance across the back), and may only target Dungeness crabs during seasons set by the states to coincide with the hardshell phase of the crab's moulting process. Softshell crabs are generally not marketable, and crabs that are discarded during the fishing process for being an illegal size or sex are more likely to survive the process of being caught and discarded during the hardshell phase. The hardshell phase usually begins around mid-November in California, arriving later in the northern areas, until about mid-January when crabs off all three states are in the hardshell phase. West coast seafood lovers know to look for Dungeness crab in the markets and on menus during the year-end holidays.

When the fishery management councils were formed following the passage of the 1976 Fishery Conservation and Management Act, the Pacific Council considered the Dungeness crab fishery as a possible candidate for a Federal FMP. However, Council members decided that the diverse and urgent management needs of the salmon and groundfish fisheries would be more than enough work for the young council to coordinate. The Dungeness crab resource was known to be fairly stable; the size-sex-season management principles ensured that no immature crabs would be landed, and that those crabs that were caught and discarded would live to replenish the crab stocks. The three states agreed to manage Dungeness crab cooperatively, and in 1980, the three state fishery agency directors entered into their first Memorandum of Understanding to pledge cooperative coastwide Dungeness crab management.

Through the ensuing years, the three states managed their Dungeness crab fisheries with common goals and management principles, but without a direct coordinating body. Over time, the states added to the basic size-sex-season management with new resource protection measures, such as escape rings on each pot for undersized crabs. All three states also require that pots have biodegradable escape mechanisms to ensure that if a pot is lost during the fishing season, a portion of the pot will quickly rot open so that the pot does not continue to "ghost fish" while lost on the ocean floor.

Dungeness crab fisheries in all three states had long histories as open access fisheries. The Dungeness crab stock tends to fluctuate over a ten year cycle, with somewhat predictable high and low levels of larger-sized male crab abundance. Some fishers would crab only in years of high abundance, or in years when other fisheries were less profitable, while other fishers would rely on Dungeness crab for a consistent and significant portion of their annual incomes. As west coast salmon became scarce and salmon fisheries restrictions more limiting in the 1980s, many fishers looked to Dungeness crab to make up for lost salmon income. Larger and better equipped vessels became part of the Dungeness crab fleet, and crabbers no longer kept to the traditional pattern of fishing for and landing crab only in their home states.

Despite these changes, the states saw no reason to add a formal, cooperative management body to the Memorandums of Understanding until the early 1990s. The opening of the 1989-90 season was a turning point in west coast Dungeness crab management for both crabbers and fishery managers. Oregon Dungeness crab season opened on December 1, 1989, to coincide with the hardshell phase in the southern half of the state. Washington biologists, however, had found that the northern crab shells were hardening later into the winter, and decided to wait to open the fishery until January 10, 1990. The tri-state Memorandum of Understanding had no mechanisms to address staggered season openings. Between December 1 and January 10, Washington crabbers watched in frustration from shore as Oregon crabbers legally caught unmarketable, softshell Dungeness crab in Federal waters off the Washington coast. Following this disaster, crabbers went to their state managers and pressed for a tri-state management body to address issues of management inconsistencies outside of the three-mile state ocean limits. The Pacific States Marine Fisheries Commission responded by offering to convene a pilot tri-state meeting

between industry participants and state fisheries agency representatives. This group, which later became known as the Tri-State Dungeness Crab Committee (TDCC), ushered in a new era in cooperative state Dungeness crab management.

State Limited Entry Programs: Tribal Treaty Rights to Shellfish

In the early 1990s, the TDCC began to discuss and study the possibility of setting up limited entry programs for the Dungeness crab fisheries of each of the three states. Heavy influx of new fishers into the crab fisheries in the late 1980s had made industry leaders realize that the fishery was overcapitalized and that without a limited entry program, an open access Dungeness crab fishery could easily become another coastwide derby fishery. The TDCC asked for support from the three state agencies for a survey of crabbers' attitudes towards limited entry programs, with the expectation that carefully designed programs would avoid many of the traditional pitfalls of introducing restrictions on the number of vessels licensed to participate in a lucrative fishery. Positive survey results induced crabbers to begin lobbying their state legislatures for limited entry programs. By 1995, all three states had set license limitation strictures in place for their Dungeness crab fisheries.

Although the limited entry programs had not solved all of the inter-state conflicts over Dungeness crab, crabbers were reluctant to take their management issues to the Pacific Council because they had invested so much time and faith into the TDCC process. However, management beyond state boundaries became particularly problematic for Washington State in 1994, when a determination in a sub-proceeding of *U.S. v. Washington* (known as the "Rafeedie decision" for its presiding judge) recognized the treaty rights of coastal Indian tribes to 50 percent of all of the harvestable shellfish in their usual and accustomed fishing areas. For the four treaty tribes of the outer Washington coast (Makah, Quileute, Hoh, and Quinault), the usual and accustomed fishing areas extend out to forty miles off the coast, fully encompassing the Dungeness crab range for the northern two-thirds of Washington State. Properly sharing the resource between tribal and non-tribal fisheries became a new management challenge for the coastal treaty tribes and Washington State, and highlighted the need for further tri-state cooperation on state regulations beyond the three mile zone.

Dungeness Crab in the 1996 Sustainable Fisheries Act

The Magnuson-Stevens Act, contains amendments from the 1996 Sustainable Fisheries Act that include an interim authority at Section 306 to allow the States of Washington, Oregon, and California to "enforce State laws and regulations governing fish harvesting and processing against any vessel operating in the exclusive economic zone off each respective State in a fishery for Dungeness crab *(Cancer magister)* for which there is no fishery management plan implemented under the Magnuson Fishery Conservation and Management Act." This provision recognizes the unique character of the west coast Dungeness crab fishery, which has been historically managed under state authority, and which must respond to a recent division of crab resources between tribal and non-tribal fishers. In this same section, Congress invokes the Council process and asks the Council to provide a report by December 1, 1997 to the Congress on progress in developing an FMP for Dungeness crab.

Immediately following on the October 1996 passage of the Sustainable Fisheries Act, the Pacific Council began to study development of an FMP for Dungeness Crab. The Council convened a panel of industry and state agency advisors who debated the merits of a new FMP and whether to abandon the tri-state management process and the new license limitation programs in the three states. This panel provided the Council with a wide range of possible future avenues, ranging from no FMP and no action after the loss of the interim authority on October 1, 1999, to a full Federal FMP with no designation of management authority to the states. The Council debated these results at several meetings during 1997, and decided that although the Magnuson-Stevens Act provides authority for a Council to create a framework FMP that delegates management authority to the states, it was reluctant to tamper with the established, well-respected tri-state management process. To meet these two goals, the Council's report to Congress requested that Congress extend and expand the interim authority already described at Section 306 of the Magnuson Act beyond 1999. H.R. 3498 and the complementary Senate bill, S. 1726, would extend that authority until such time that the Secretary or Council might decide that integrated Dungeness crab management could be accomplished better through a Federal FMP.

This concludes my testimony, Mr. Chairman. I would be happy to answer any questions you and the Subcommittee may have.

STATEMENT OF PHILIP ANDERSON, MEMBER, PACIFIC FISHERY MANAGEMENT COUNCIL

Good morning. My name is Philip Anderson. I represent the Washington Department of Fish and Wildlife on the Pacific Fishery Management Council (Council) and I am here on behalf of the Council today. Thank you for inviting the Council to testify on H.R. 3498, a bill to amend the Magnuson-Stevens Fishery Conservation and Management Act to authorize the states of Washington, Oregon, and California to regulate the Dungeness crab fishery in Federal waters.

We thank Mr. Miller, Mr. Blumenauer, Mr. DeFazio, Ms. Furse, Ms. Hooley, Mr. Riggs, Mrs. Smith and Mr. Young for introducing this legislation. If enacted, the bill would implement all of the recommendations submitted by the Council in its report of October 1997. We request that the report be made a part of the record of this hearing. The Council adopted these recommendations by unanimous vote after considering, together with the tribes and industry representatives, the most efficient and cost-effective means of managing the Dungeness crab fishery off the coasts of California, Oregon, and Washington. The recommendations incorporated in the bill were reached following an agreement amongst industry representatives.

The basis for the Council's recommendation is as follows:

Avoids Duplication of Management Effort

Historically, the states have successfully managed the fishery and have the technical expertise to continue into the future. The overlay of a Federal plan would add an unneeded cost to managing this fishery. In addition, industry representatives would not have the added cost and time burden of participating in both a state and Federal management system.

Does Not Preempt Future Federal Management

Dungeness crab are not currently managed under a Federal management plan. If, in the future, the Council determined that the management of the Dungeness crab resource would be improved under a Federal management plan, nothing in this legislation would prevent them from taking such action.

State/Tribal Management Plans

Federal District Court Judge Edward Rafeedie's August 28, 1995, implementation order, in combination with a court approved stipulation between the state of Washington and the Quinault Indian Nation, requires the state and tribes to develop joint harvest management plans and/or cooperatively manage shellfish resources within the tribes' usual and accustomed fishing grounds and stations. This bill would remove the need for a duplicative Federal process while allowing the state of Washington to implement and enforce equitable management measures for non-Indian fisheries operating within the tribes' usual and accustomed fishing grounds and stations that extend into Federal waters.

Expansion of Existing Interim Authority

The bill would expand the limitations placed on the interim authority currently provided to the states for Dungeness crab to include any management measure needed with the exception of state limited entry laws. Moreover, the bill would limit participation to fishing or processing operations licensed by either California, Oregon, or Washington.

For these reasons, the Council is recommending that it continue to focus its efforts on Federal management plans for species, such as salmon and groundfish, that (1) have coastwide migration and distribution, (2) have international management implications such as the Pacific Salmon Commission and transboundary groundfish stocks, and (3) have implications relative to the Endangered Species Act.

The Council urges the House to pass the legislation in a timely manner. The interim authority provided the states expires October 1, 1999. In the absence of legislation, the Council will need to begin the arduous and time-consuming task of developing a Federal plan to avoid a lapse in the needed management authority.

STATEMENT OF RANDY FISHER, EXECUTIVE DIRECTOR, PACIFIC STATES MARINE FISHERIES COMMISSION

Good Morning, my name is Randy Fisher. I am the Executive Director of the Pacific States Marine Fisheries Commission. The Commission was chartered by Congress in 1947. The Compact signed by the States of Alaska, Washington, Oregon, California and Idaho has the goal of supporting policies and actions directed at the conservation, development, and management of fishery resources of mutual concern to member States through a coordinated regional approach to research, monitoring and utilization.

Consistent with that direction, I am here representing the Commission and, specifically, the Washington State Department of Fish and Wildlife, the Oregon Department of Fish and Wildlife and the California Department of Fish and Game.

Landing of Dungeness crab in the coastal fisheries of California, Oregon, and Washington have maintained a cyclic pattern for nearly 50 seasons. Harvests have ranged between 8 million and 54 million pounds, and peak approximately every 10 years. During the most recent 10 seasons, coastwide annual landings averaged 33.8 million pounds, of which 28 percent were landed in California, 31 percent were landed in Oregon, and 41 percent were landed in Washington. The total annual ex-vessel value of the coastwide fishery since the 1981-82 season has ranged between $17 million and $70 million.

The total number of vessels landing in each individual state has increased historically, but since the 1981-1982 season, the number of coastwide participants has remained relatively stable between 952 and 1,302 vessels. In any year, an average of 94 percent of these vessels land in only one state, with only 6 percent landing in two of the three states, and less than 1 percent land in all three states.

Dungeness crab fisheries in California, Oregon and Washington are managed under the regimen known as "3-S," i.e., size-sex-season. Only male Dungeness crab are harvested commercially. State managers do not make pre-season forecasts of stock abundance, and harvest levels are based on recruitment into acceptable harvest categories.

The basic management structure has been stable over time. All three states standardized methods of measurements in the mid-1960s. Season opening dates have generally remained the same since the late 1960s.

Although the regulations governing the fishery are adopted by independent administrative processes in each state, they are generally consistent. An interstate Memorandum of Understanding first signed in 1980, committed the state management agencies to take mutually supportive crab management actions.

I mention this background to illustrate the long history of cooperative nature of crab management between the states.

In 1990, at the request of the crab industry, the Pacific States Marine Fisheries Commission formed the Tri-State Dungeness Crab Committee. There are currently 19 members on the Committee, representing Dungeness crab fishermen and processors on the Pacific Coast. The Committee was designed to have representation from the entire coast. All recommendations of the Committee are based on consensus of its members. The Committee itself is only an advisory body, its recommendations can be implemented only through the separate regulatory procedures established in each member state.

In 1993, the PSMFC was asked to survey the crab fleet and assess support for limited entry among vessel owners. Based on the results of the survey, the Tri-State Dungeness Crab Committee participants sponsored independent crab license limitation efforts in their home states. These programs became effective in 1995, the 1995-1996 crab season was the first in which all coastal crab fisheries operated under license limitations.

The Pacific Fishery Management Council considered and declined to develop a Federal fishery management plan for Dungess crab in the late 1970s, suggesting that the states were adequately managing the resource. In April 1995, the state of Washington requested that the Pacific Fishery Management Council again consider a Federal FMP for Dungeness crab. Washington later suspended its request pending the outcome of an attempt to amend the Magnuson-Stevens Fishery Conservation and Management Act.

That authority allowed the states to apply regulations that opened and closed seasons, set minimum sizes and crab meat recovery rates, and implemented treaty Indian harvest requirements using area closure or port limitations to all vessels fishing in the adjacent Federal EEZ. State programs limiting entry to the fishery were specifically excluded from this extended authority. The Interim Authority is effective through October 1, 1999.

In September of 1997, after a review by an ad-hoc panel and the Tri-State Dungeness Crab Committee, the Council voted unanimously to request that the current Interim Authority be made permanent.

This request is not precedent setting since Congress and the National Marine Fisheries Service accepted similar state management of king crab fisheries in the Gulf of Alaska. This legislation does allow anyone who has an appropriate permit from California, Oregon, or Washington to fish in the EEZ. This is a coordinated management approach that reflects a long history of state Dungeness crab management between California, Oregon and Washington.

The legislation represents a negotiated settlement between the states and is favored by the vast majority of fishermen, processors, tribes, the Pacific States Marine Fisheries Commission and the Pacific Fishery Management Council.

The Commission strongly recommends that this legislation be passed as drafted and enacted this year.

STATEMENT OF NICK FURMAN, EXECUTIVE DIRECTOR, OREGON DUNGENESS CRAB COMMISSION

My name is Nick Furman and I am the Executive Director of the Oregon Dungeness Crab Commission (ODCC). The ODCC is a fishermen-funded Commodity Commission that operates under the umbrella of the Oregon Department of Agriculture (ODA). The Commission is comprised of seven industry members, appointed by the ODA Director to represent the commercial crab fleets in all of the major ports along the Oregon coast. Five seats are held by crabbers, and two positions are filled by processors. Collectively, the Commissioners represent over 450 Oregon Dungeness crab permit holders, and it is on their behalf that I offer the following.

With the exception of a brief foray into Oregon's limited entry debate some years back, the Commission has historically stayed true to its primary mission which is to enhance the image and profitability of the crab industry through market development and promotion. I mention this only to underscore how concerned the present members of the Commission are over the future of the crab fishery as it relates to the legislation before you, and how convinced they are that H.R. 3498 is in the best interests of their constituents as well as the entire crab industry.

The West Coast Dungeness crab fishery is one of the soundest fisheries in the nation, with an enviable track record dating back to the late 1800's. Albeit cyclical, the stocks are healthy and well-managed. Only mature male crabs meeting specific size regulations are landed. Female crabs, and sub-legal males are left in the ocean to reproduce, insuring adequate recruitment for subsequent years. Fishing activity ceases during the period of post-molt vulnerability in the late summer and fall to minimize handling mortality. The harvest method is targeted and the gear employed is selective. Bycatch, a problem facing so many other fisheries, is not an issue with respect to the crab fishery. In short, there are no compelling conservation or biological reasons to alter the fishery's present form of state management.

In 1996, Congress amended the Magnuson-Stevens Act, giving the states of Oregon, Washington and California interim authority to manage the Dungeness crab fishery occurring within the Exclusive Economic Zone (EEZ) adjacent to their respective state waters. The same simple, but highly successful management methods that have served the fishery well for decades, were expanded into Federal waters off each state. During that period, the states have demonstrated the ability and willingness to work together in solving management related issues associated with the fishery, with "memorandums of agreement" in place to deal with specific items such as soft-shell testing, delayed openers and reciprocity. Regulations are, for the most part, consistent between the three states. A "Tri-State Dungeness Crab Committee" exists under the auspices of the Pacific States Marine Fisheries Commission and is recognized as a legitimate forum to discuss and resolve the socioeconomic issues facing the crab industry coast wide. Recent limited entry legislation adopted in all three states has curtailed access to the crab fishery by putting a cap on the number of available permits, thereby insuring that fleet size will remain the same and that the ranks will not swell beyond current numbers. In short there are no compelling management reasons that warrant the adoption of a Federal Fisheries Management Plan (FMP) at this juncture.

While differences admittedly exist between the fleets and fishermen of the three states, all agree that extended state management within the EEZ is the best way to address those issues by assuring that regulatory authority will be consistent, and at the same time, sensitive to specific regional needs. H.R. 3498 represents two years worth of negotiation by representatives of the entire West Coast crab industry, in which all parties agreed to put aside their parochial interests in an effort to preserve the traditional and historic nature of the Dungeness crab fishery, while at the same time, insuring that future considerations can be met in a responsible and cohesive manner. It has the support of an overwhelming majority of the fishing industry, the tribal interests, the associated state agencies and the Pacific Fisheries Management Council itself, who's jurisdiction the crab fishery would come under should efforts to pass this legislation fail. In short, there is virtually no opposition to this bill from any party with a legitimate vested interest in the Dungeness crab fishery.

In the late 1970's, the PFMC began working on an FMP for Dungeness crab, only to abandon the effort after concluding that it would serve no purpose at that time. Nothing has changed. If anything, the role of management within the crab fishery has only improved since then with the adoption of limited entry programs and enhanced inter-state cooperation. Recently, the Pacific Council itself voted unanimously in favor of a legislative response to the suggestion that it revisit the FMP process for Dungeness. FMP's are complex, cumbersome and costly. The Dungeness crab fishery is simple. It will not benefit from the data generated to complete an

FMP, nor will it be any better off under the management authority of a Fisheries Council. The money needed to develop and implement a fisheries management plan for Dungeness crab would be far better spent addressing the crucial issues facing other West Coast fisheries that do need the help. In short, if it's not broken, don't fix it.

Over the past year, the Dungeness Crab Commission has given members of the Oregon crab fleet numerous opportunities to comment on the Commission's position on this issue, and it's role in the attempt to get the resulting legislation passed. Not once have they received anything less than whole-hearted support and encouragement. Anyone familiar with our crab fleet can appreciate how unusual that unanimity is. The Commission is convinced that H.R. 3498 is a good bill, that it reflects the desires of the majority of the West Coast crab industry, and that the resource and those who depend on it will be better off in the event of its successful passage. Thank you for the opportunity to speak on behalf of the Crab Commission and Oregon's 450 crab permit holders in support of this legislation.

STATEMENT OF LARRY THEVIK, BOARD MEMBER, WASHINGTON DUNGENESS CRAB FISHERMEN'S ASSOCIATION

My name is Larry Thevik. I am a lifetime resident of Washington State and have been a commercial fisherman for twenty seven years.

I want to thank Congressman George Miller and the Co-sponsors who introduced H.R. 3498. I also want to thank the Committee for inviting me to testify in support of this legislation authorizing the States of Washington, Oregon, and California to regulate Dungeness crab in the EEZ.

This is extremely important and welcome legislation for crab fishers and for the coastal communities where we work and live.

Over the years I have participated in a number of West Coast fisheries including salmon and albacore trolling, longlining for groundfish and halibut, pot fishing for prawns, and pot fishing for Dungeness crab. Crabbing has been my primary source of income. I have fished for crab in Washington and Oregon.

I am submitting this testimony on behalf of the Washington Dungeness Crab Fishermen's Association and the Columbia River Crab Fishermen's Association. WDCFA is based in Westport, Washington on Grays Harbor and CRCFA is based in Ilwaco, Washington at the mouth of the Columbia River. WDCFA and CRCFA are the largest organizations of Washington Coastal crab fishers. The majority of Washington crabbers depend on crab for most of their fishing income.

The West Coast Dungeness crab fishery is conducted off the Coasts of Washington, Oregon, and California. Except for a small trawl "bycatch" allowed in California the fishery is conducted with pots. The directed pot fishery has almost no "bycatch." Only males of a specified size are retained. Undersized males and all females that do not escape from "escape rings" required in each pot are immediately returned to the sea. The fishery occurs from the shoreline out to the edge of the continental shelf. Most fishing effort occurs in depths less than 70 fathoms. The primary management tools are size, sex, and season. Crab are not considered a highly migratory species. The fishery is confined to the eastern one-fifth of the EEZ and to state waters. The largest extension of the fishery into the EEZ occurs off Washington where the edge of the continental shelf extends just under 40 miles westward of the shoreline. The amount of crab caught in the EEZ varies between the States with California catching the majority of crab within state waters while over half of the crab landings in Washington originate from beyond the State's three mile limit.

The Dungeness crab fishery has been managed by the States for decades. The States have coordinated effort on many issues through the Pacific States Marine Fish Commission, (Tri-State). In the 70's the newly created Pacific Fisheries Management Council considered the need for the development of a Federal Management Plan for crab and deemed that existing state management met conservation and management goals. Although Dungeness crab is one of the least regulated fisheries on the West Coast it has also been one of the most successful. State management has worked well.

While the States have done a good job, the underlying problems resulting from their lack of management authority in waters beyond three miles have intensified. The extension of the crab fishery into deeper waters, the expansion of vessels and gear, the passage of limited entry in each of the three States, and Federal court rulings on shellfish in 1994, requiring increased tribal harvest opportunities in Washington State, have forced a renewed look at the outstanding issue and need for management authority in the EEZ.

With the exception of each State's limited entry laws H.R. 3498 will provide consistent regulations and authority within three miles and outside three miles off each State. Enforcement issues will be clear. Safety issues and overcapitalization can be addressed. And the burden of court required tribal harvests can be fairly implemented. Without consistent regulatory authority Washington licensed vessels would bear the burden of tribal allocation while vessels from other states would not be similarly restricted.

Congress granted limited interim authority in order to provide short term management protection while the West Coast considered a more permanent solution. We are grateful for that relief and ask again for your help. Representatives from all segments of the industry and regional, state, tribal, and Federal representatives have voiced support for this legislative solution. H.R. 3498 is not the unilateral action of one state at the expense of another. H.R. 3498 does not dismantle an existing Federal plan. H.R. 3498 does not preclude development of an FMP for crab should it become necessary. This legislation has the unanimous support of the PFMC and is a reasonable, economical, and timely solution to a complex regional fishery problem.

The legislative request by the Council on behalf of the West Coast Dungeness crab fishing industry is the result of a considered and inclusive Federal process to decide upon a regional course of action. H.R. 3498 provides additional tools necessary to manage the West Coast Dungeness crab fishery without overturning the fundamental management regimes that have worked well in the past and can with your help work well into the future.

Both WDCFA and CRCFA appreciate your consideration of this legislation. As fishers we depend on a sustainable fishery. We do not support management for management's sake but we do support effective management to ensure resource health and economic viability. WDCFA and CRCFA believe this legislation will help us accomplish the management tasks needed for this fishery. We are hopeful H.R. 3498 will be passed out of this Committee for timely enactment.

STATEMENT OF PIETRO PARRAVANO, PRESIDENT, PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS

Good morning, Mr. Chairman and members of the Subcommittee. My name is Pietro Parravano and I am the president of the Pacific Coast Federation of Fishermen's Associations (PCFFA), which represents working men and women in the west coast commercial fishing fleet. PCFFA is the largest commercial fishermen's group on the U.S. west coast and represents, among others, the majority of California's Dungeness crab fishermen.

I wish to thank you for agreeing to hold this hearing on this legislation of great importance to us on the west coast and thank Mr. Young and Mr. Miller for introducing H.R. 3498. I have been a Dungeness crab fisherman since 1982 operating out of the California port of Half Moon Bay. It is from the perspective of a California commercial crab fisherman that I present these remarks today.

Members may ask why is this legislation necessary? What is the problem? Why give these three states extended authority over this fishery? Why not put Dungeness crab under a Federal Fishery Management Plan (FMP)? To answer these questions and for you to understand why we support H.R 3498, it is important to briefly review the history of this fishery and its management.

Historically most Dungeness crab fishing occurred in nearshore ocean waters, much of it in state waters. States regulated the fishery by seasons, size limits (including a prohibition on the take of female crab in the commercial fishery), and specifications on gear requiring "escape ports" (allowing undersized crab to escape the trap) and "destruct panels" (cotton or other degradable material mesh in the traps that will prevent the trap from continuing fishing if it is lost). Because most crabbers operated out of the port (and state) where there crab gear was located, state vessel registration and fishing license requirements meant the states had control over most Dungeness crab fishing, even that occurring offshore in Federal waters. Although the fishery has been highly cyclical, all evidence points to it being sustainable, state management of the crab fishery has been successful.

Following passage of the Fishery Conservation & Management Act in 1976, a number of west coast fisheries were considered for Federal FMPs, including Dungeness crab. After the establishment of a Crab Advisory Subpanel and over a year of consideration by the Pacific Fishery Management Council, it was decided a Federal plan for the crab fishery was *not* necessary. There were other fisheries needing more attention, such as salmon and groundfish, and there was good state regulation and cooperation among the states on the management of the crab fishery; thus, there was no compelling need for Federal management.

There has been a long history of active state management of fisheries in California, Oregon and Washington. In California, where our Department of Fish & Game is primarily funded by user fees, including our commercial licenses, vessel registrations, permits, stamps and landing taxes, the state has actively managed fisheries in state waters. It has also regulated fishing in Federal waters offshore the state where a vessel held a California commercial fishing vessel registration (available to vessels from any state), or the person or persons on board held a California commercial fishing license (again, available to a person from any state). This has been true, as well, for managing Dungeness crab.

Moreover, there has been close coordination and cooperation among the three states on certain fisheries, including Dungeness crab, through the Pacific States Marine Fisheries Commission. Indeed, it has been through the PSMFC's Tri-State Crab Committee, that the states have coordinated on their response to the domoic acid threat and developed limited entry programs for the crab fishery. That cooperation and coordination between the three states' agencies and industry, through the Tri-State Committee, continues to this day.

Recent changes in the Dungeness crab fishery, we believe, now warrant specific management authority for the Dungeness crab fishery in Federal waters. First, as other speakers will testify to, there has been the court decision allocating half of the harvestable amount of shellfish in Washington State to the treaty tribes. In order to protect that state's non-treaty Dungeness crab fishery, the state must have the authority to regulate beyond its state waters to assure a fair and equitable allocation of the crab.

Second, there has been a gradual change in the harvest of Dungeness crab. Increasingly, vessels are fishing in deeper water further offshore, mainly in Federal waters, with more and more traps. That in itself is not a problem where states can exercise jurisdiction over vessels registered in those states. It is a problem, however, with larger vessels, with no connection to the state they are fishing off, that are able to tank their crab and travel long distances from the place where the crab were caught to the place of delivery. It is now possible, for example, for a large tanked vessel to come from the north, operating with a thousand or more traps to fish in the EEZ off Eureka, Fort Bragg, Bodega Bay or even San Francisco, ignore state conservation regulations and then unload its catch in another state.

Given the scenario above, it may seem that it is now time for a Federal plan for Dungeness crab. But before jumping to that conclusion, it is important to answer the following questions:

1. **Are the states capable of managing the fishery within the EEZ?** Yes. The fact is the states have been managing their own vessels and fishermen in the past harvesting Dungeness crab in the EEZ. It is only the vessels that are not registered by the state that a state has no authority over. This, of course, can be remedied by delegating to the states management authority over this fishery in the EEZ.

2. **Are there conflicts between the states that require Federal management of this fishery?** No. As mentioned above, there is a long history of cooperation and coordination by the three states in the research and management of the Dungeness crab fishery. A Federal FMP would do nothing to improve upon the current level of coordination and cooperation.

3. **Will there be confusion about boundaries if state jurisdiction is extended over this fishery into the EEZ?** No. The political boundaries of the three west coast states are such that it is easy to draw lines westward establishing straightforward boundary lines making clear to fishermen which state authority they are under, and making clear to enforcement officials which vessels operating within the EEZ that they do and do not have jurisdiction over at any given time.

4. **Will a Federal fishery management plan for crab require additional Federal expenditures?** Yes. The preparation of fishery management plans cost hundreds of thousands of dollars and most require annual updates. In addition to the regional council costs, there are also costs involved for the National Marine Fisheries Service administering an FMP. With the current lack of adequate funds for such things as groundfish research or restoration of salmon habitat, where are the funds to come from for preparation of a Dungeness crab FMP? There is also a question of staff time. With plans afoot for coastal pelagic and, perhaps, a highly migratory species FMP, where is the additional staff for the Pacific Council and NMFS to come from? At the same time, state management of the Dungeness crab fishery is not costing the Federal treasury anything. The states are picking up the cost and much of that is being paid for by industry through landing taxes and permit fees.

5. **Is there precedent for delegating to states management of a fishery within the EEZ?** Yes. The State of Alaska has management authority over the crab fishery in the EEZ in the Gulf of Alaska. Giving management over the Dungeness crab fishery in the EEZ to California, Oregon and Washington is not without precedent elsewhere.

Mr. Chairman, I believe the facts are clear. There needs to be management authority over the Dungeness crab fishery in the Federal EEZ and it is the three states that are best suited to take on that authority. Certainly when Congress passed the Fishery Conservation & Management Act in 1976, what we now call the Magnuson-Stevens Act, it did not intend to create a one-size-fits-all type of management for our fisheries. It did not seek to throw out our Federal system that provides for diversified experimentation.

We need conservation and management authority for our crab fishery in Federal waters, but that does not mean we need Federal management for this fishery. Admittedly, where there are conflicts between states, or where state commissions are dominated by recreational or processing sectors, Federal management may be the only way to protect stocks and those whose livelihoods depend on fisheries. But here there is cooperation between users and the agencies; the states have demonstrated they are capable of managing the Dungeness crab fishery in an effective and cost efficient manner.

We strongly urge the support of this Subcommittee and of the full House Resources Committee of H.R 3498 for the sake of the west coast Dungeness crab resource, its multi-million dollar Dungeness crab fishery, and for persons, such as myself who derive income from this fishery and who enjoy providing consumers the very best in seafood. Thank you. I will be happy to answer any questions.

STATEMENT OF ROD MOORE, EXECUTIVE DIRECTOR, WEST COAST SEAFOOD PROCESSORS ASSOCIATION

Mr. Chairman, Members of the Subcommittee, I want to thank you for holding this hearing on H.R. 3498, the "Dungeness Crab Conservation and Management Act." Special thanks are due to Congressman Miller for sponsoring the bill, and to those Members from Alaska, Oregon, Washington, and California who provided their bi-partisan co-sponsorship.

For the record, my name is Rod Moore, I live in Portland, Oregon, and I am the Executive Director of the West Coast Seafood Processors Association (WCSPA). Our Association's members—who are all American-owned, on-shore processors—operate facilities in California, Oregon, and Washington which process the majority of Pacific groundfish, Dungeness crab, and pink shrimp landed in those States, along with salmon, swordfish, albacore tuna, and other species. Several of our members operate processing facilities or vessels in Alaska, and several are involved in transportation and distribution of seafood products.

It is not a normal occurrence for me or the members of my Association to ask Congress to legislate a fisheries management system which does not involve the Pacific Fishery Management Council. We support the Council system, the Vice President of our Association is a former Council member, and one of our directors currently serves on the Council. I and several of our members serve—or have served—on Council committees.

However, with west coast ocean Dungeness crab, we have a unique situation—a fishery that has been successfully conserved and managed by the States of California, Oregon, and Washington for decades. A forum for management cooperation is already in place which involves fisherman, processors, and the States, under the umbrella of the Pacific States Marine Fisheries Commission. Access limitation programs are in place in all three States. Biological studies and enforcement are conducted by the States. Tribal treaty concerns are accommodated by the State of Washington. In short, we are successfully conserving and managing the resources, so we see no reason to establish a new management system which will impose additional costs on the taxpayers.

Perhaps it would be helpful to look at the law and at other fisheries to determine whether passing H.R. 3498 is the best way to go.

Section 302(h) of the Magnuson Stevens Fishery Conservation and Management Act (MSFCMA) says that Councils will establish a fishery management plan for "each fishery under its authority that requires conservation and management . . ." In practice, the Councils, the National Marine Fisheries Service, and the Congress have treated this requirement flexibly, tailoring actions to particular regional needs. On the east coast, several fisheries are managed jointly by the States through the Atlantic States Marine Fisheries Commission. In some cases, this involves the Com-

mission setting minimum standards for conservation and leaving particular management measures to the appropriate State authority. This arrangement has been blessed by the Congress even though the fish stocks involved may migrate through the waters of several States and the exclusive economic zone.

In Alaska, the Dungeness crab fishery is managed by the State. The king and tanner crab fisheries in the Bering Sea are managed under a joint State-Federal fishery management plan. Those same species in the Gulf of Alaska are managed solely by the State of Alaska. Salmon—other than troll salmon in Southeast Alaska—is under State management, as is Pacific herring.

On the west coast, pink shrimp, Dungeness crab, herring, and swordfish are all under State authority.

In addition, Pacific albacore tuna and Atlantic bluefin tuna are managed under international treaties.

How do we decide if a fishery requires conservation and management under a fishery management plan? First, of course, we look at whether there are appropriate restrictions on harvesting and processing to ensure a sustained yield of the species in question. If conservation cannot be ensured, then a fishery management plan needs to be put in place.

Second, we need to look at the characteristics of the fishery and the existence of other authority. Are there treaties in effect? Do the fish travel into international waters or the waters of other countries, so that a Federal presence is required? Can States effectively enforce conservation rules? These are all considerations.

Third, we look at allocation among participants. While fishery management rules cannot have allocation as their sole purpose, the need to allocate among users—sport, commercial, domestic, foreign, tribal, different gear types—certainly influences the decision.

And last, we look at cost. Can existing authority manage more efficiently and with less cost, or do we need to impose a fishery management plan?

Although none of these considerations are explicitly stated in the law, they are in fact the reality with which we deal when deciding how fisheries are going to be conserved and managed.

If you apply this four-part test to west coast ocean Dungeness crab, you will find that the existing system of State management is successful with the exception of one small gap which this legislation covers. Crab are harvested both within State waters and the exclusive economic zone. Because the crab fleet is mobile, it is common practice for a fisherman from one State to fish in the exclusive economic zone adjacent to another State and land his catch in his home State. However, if the State off whose coast he is fishing enacts conservation rules, this mobile fisherman can choose to ignore them as long as he is fishing only in the exclusive economic zone. By extending State authority for *conservation* purposes throughout the adjacent exclusive economic zone, H.R. 3498 solves the problem.

This bill, like other actions of the Congress and the National Marine Fisheries Service before it, deals with a unique situation in a straight-forward, practical manner that recognizes the realities of an important fishery. In the past, the Congress has provided State authority over sections of the exclusive economic zone under section 306 of the MSFCMA. Congress has provided east coast States with authority to manage certain fisheries through the Atlantic States Marine Fisheries Commission. Congress provided interim authority for State management of Dungeness crab under the Sustainable Fisheries Act in 1996, authority that will expire next year.

NMFS has recognized the practicality of State management on king crab in the Gulf of Alaska. In fact, NMFS has twice turned down attempts by the Pacific Fishery Management Council to adopt a fishery management plan for coastal pelagic species, a fishery which—due to its international extent—requires a Federal presence. NMFS reason for doing so was that the fishery should more appropriately be *under State management.*

H.R. 3498 is widely supported, as you can see from the witnesses here today. Getting to this point has not been easy. The Council conducted public hearings on the issue of Dungeness crab management, established a committee to look at management options, asked the Tri-State Dungeness Crab Committee to further refine options, prepared a report to the Congress, and considered in public session what draft legislation might look like. The result of these efforts was a unanimous vote by the Council on a motion offered by the member representing northwest tribes to ask Congress to consider this legislative solution.

What happens if this bill is rejected? First, the gap in management authority in the exclusive economic zone that I previously mentioned will have to be addressed. The Council will have no choice but to develop a fishery management plan. That will cost the Council and NMFS—and ultimately, the taxpayers—some money.

Given that neither the Council nor NMFS has enough funds right now to do even basic research on Pacific groundfish, I don't know where the money will come from.

Second, we will have to put in place a new management system under the authority of the MSFCMA. All of the allocation fights that we have put aside in order to develop a rational legislative solution will come up again. NMFS will have to figure out overfishing levels, MSY, and essential fish habitat, among other things, for a fishery that is currently conserved by allowing the harvest of only male crab on a minimum size during a specific season. Existing State limited entry laws may have to be examined. We could conceivably have a separate management scenario for the exclusive economic zone than we have for State waters. It would be expensive and it would not be a pretty sight.

Keep in mind that H.R. 3498 does not preclude the Council from stepping in at some point in the future if State management no longer effectively conserves the crab resource. Under the bill, State authority stays in effect only so long as there is no fishery management plan. The burden will be on us, if we don't want a fishery management plan, to ensure that State management works. We recognize that and we are willing to accept the challenge.

Mr. Chairman, it is not often that you can pass bipartisan legislation that reduces bureaucracy, saves the taxpayers' money, conserves a major fishery, and which is supported by all affected parties. With H.R. 3498, you have that opportunity. I urge you to act quickly to move this bill through the legislative process. Thank you.

STATEMENT OF ROLLAND A. SCHMITTEN, ASSISTANT ADMINISTRATOR FOR FISHERIES NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE

NOAA FISHERIES' COMMITMENT TO WEST COAST GROUNDFISH

Mr. Chairman, thank you for inviting me to testify before the Subcommittee today on West Coast groundfish. I am Rollie Schmitten, Assistant Administrator for Fisheries and Director of the National Marine Fisheries Service (NMFS). I am accompanied by William L. Robinson, Assistant Regional Administrator for Sustainable Fisheries in NMFS' Northwest Region, and Dr. Richard Methot, Director of the Fisheries Resource Analysis and Monitoring Division of NMFS' Northwest Fisheries Science Center.

The National Oceanic and Atmospheric Administration (NOAA) is deeply and unequivocally committed to the sound stewardship of ocean fisheries and the marine and coastal environment. There are two essential building blocks to making that commitment a reality: the strong and unwavering support of leaders in the executive and legislative branches to that commitment; and a sustained investment in sound science to generate the information that will enable us to translate that commitment into good decisions.

Our topic today is the challenging West Coast groundfish fishery and our opportunities to improve our stewardship of it. We at NOAA recognize that substantial improvements are needed. We have made solid progress over the last several years to develop the capacity to realize those improvements, and more importantly, we continue to gear up to ensure that progress continues.

Pursuant to the Magnuson-Stevens Act, NOAA Fisheries is responsible for providing scientific information on which to base fishery management decisions and working with the Pacific Fisheries Management Council to structure an effective management of that fishery. The agency's Northwest, Southwest and Alaska Fisheries Science Centers conduct research that provides the scientific basis for Pacific Fishery Management Council recommendations to NOAA on harvest levels for West Coast groundfish stocks. This information is provided via stock assessments conducted by NOAA Fisheries, state, and university scientists using data from surveys and state fishery monitoring programs.

We fully acknowledge that members of the commercial fishing industry have criticized the NOAA Fisheries' stock assessments that led to reductions in the commercial harvest of several important groundfish species in 1998. The fundamental limitation on those assessments is the paucity of data upon which they are based. Our challenge, simply put, is to improve the quality and quantity of survey data that go into the stock assessment. As stated in a recent National Research Council report, NOAA Fisheries' stock assessment methods are the best available, but, nevertheless, could benefit from improved data. Sparse and/or difficult to calibrate data lead to high level of uncertainty in these assessments.

NOAA Fisheries, in the last few years, has moved aggressively to expand the West Coast groundfish program in the Northwest Fisheries Science Center

(NWFSC). In addition, we are taking advantage of increasing opportunities to develop cooperative data collection programs which will utilize fishers' experience, knowledge, and time-on-the-water.

Reflecting that priority, in January 1995 the NWFSC's groundfish program began to provide a coordinated stock assessment program focusing on the important and valuable deep-water species (sablefish, Dover sole, thornyheads). The program had a budget of $1.5 million and a staff of seven, most of whom moved from other NMFS Centers. In 1997, the program delivered new stock assessments for these deep-water species, heightened its dialogue with constituents to develop cooperative data collection projects, and developed methods in conjunction with the University of Washington to conduct trawl surveys with local fishing vessels.

In 1998, coaxing still more from an overtaxed budget, NOAA Fisheries added an additional $750,000 in permanent funding to its Northwest Region for West Coast groundfish management and research. The majority of the $750,000 will be used to support several new staff positions and new major cooperative projects with the commercial fishing industry and other scientists, both of which will improve NOAA Fisheries stock assessments. Also, NOAA provided an additional $400,000 to the NWFSC in 1998 to continue the deep-water slope survey by chartering commercial fishing vessels while the NOAA vessel *Miller Freeman* is in dry dock. These funds, plus first-tmne use of compensation with fish under the new "Fish for Research" provisions of the Magnuson-Stevens Act, will be used to prepare for and conduct the resource survey.

Implementation of the "Fish for Research" provisions of the Magnuson-Stevens Act in West Coast groundfish will set precedents in an important new phase of fisheries management. "Fish for Research" will allow NOAA fisheries to compensate fishing vessel owners who conduct chartered resource surveys with the harvest of additional groundfish in order to offset the cost of the survey. This will stretch the NWFSC's budget further and allow greater amounts of scientific data to be collected each year. We are excited about the prospects and are pushing hard to implement "Fish for Research" quickly. We will set aside a small fraction of the annual total allowable catch to be used as compensation for vessels that are chartered by NOAA Fisheries to conduct the scientific survey, and thereby achieve the objective of generating additional valuable data. We anticipate that this program will be an exciting prototype for the management of the nation's fisheries.

NOAA Fisheries sees the West Coast groundfish research program as a great opportunity to develop cooperative data collection programs which will take advantage of fishers' experience, knowledge, and time-on-the-water. This cooperative program is critical to providing the best available scientific information on which to base decisions on annual harvests to achieve optimum yield while conserving the long-term health of the stock.

BACKGROUND

What are West Coast Groundfish?

The term "groundfish" oversimplifies the complexity of the biological and fishery situation. In fact, the Pacific Fishery Management Council's Fishery Management Plan for groundfish includes 83 species. Examples are Pacific whiting (hake) which is an abundant migratory, schooling fish; yelloweye rockfish which is a sedentary, nearshore reef-oriented rockfish; and grenadiers which are bottom-dwelling, deep-water fishes. The fishery is equally complex with catcher-processors using midwater trawls to target on whiting; bottom trawlers targeting flatfishes, rockfish and other species; various hook and line and pot gears targeting sablefish and rockfish; and recreational fisheries targeting nearshore rockfishes.

It is convenient and useful to categorize groundfish into five groups based upon their habitat and target fishery. These include: (1) midwater (principally Pacific whiting); (2) deepwater (sablefish, dover sole, 2 thornyheads, grenadiers); (3) shelf (principally trawl-caught rockfish and lingcod); (4) nearshore rockfish (principally other rockfish species caught by hook and line or by recreational fishermen); and (5) nearshore flatfish.

This diversity of species and users requires a wide range of monitoring tools and a multi-faceted management system to achieve management goals. Many of the groundfish species are long-lived (50+ years). Thus, the recent 15-20 year history of full exploitation and intensive management under the Magnuson-Stevens Act is not much more than one generation time for many species. We are just beginning a course of sustainable management for the long-term.

Management System

The annual acceptable biological catch (ABC) is set for each major species largely on the scientific advice provided in the stock assessments. A harvest guideline (HG)

is set for a target level of landed domestic catch. Expected levels of non-landed catch (discard) are generally subtracted from the ABC when setting the HG. Other adjustments include set asides for expected catch by Canada and coastal tribes.

A Limited Entry (LE) system was implemented in 1994. Federal permits were established based on vessel catch history during 1984-1988 period. Permits are endorsed for gear-type (trawl, pot, longline) and for vessel length. Permits are transferable, and permits from smaller vessels can be combined into a permit for a larger vessel according to an established formula.

Catch allocations are calculated to better achieve the social and economic goals of the PFMC, in that:

a. Set asides for Treaty Indian and expected recreational catch are deducted from the harvest guideline (where appropriate).
b. An established formula sets the allocation between the Open Access and Limited Entry sectors.
c. Some further allocations occur within the LE sector (shoreside vs. at sea delivery of Pacific whiting; trawl vs. fixed gear sablefish catch).

Pacific whiting and fixed gear sablefish are managed primarily as derbys, with relatively unconstrained fishing until the HG is attained, then cessation of large-scale directed fishing. Other species support a fresh fish market, and processors/marketers have strong desire for a year-round supply. Trip limits were first instituted in 1983 to slow the pace of the widow rockfish fishery. Today cumulative monthly vessel landing limits are used for about 10 species in order to slow the pace of the fishery and delay HG attainment until near the end of the year. Unfortunately, declining ABCs and overcapitalization in the fishery have caused these landing limits to substantially decline.

In addition, size limits, gear restrictions and area/season closures are set to improve biological and economic yield or to reduce adverse impacts of fishing.

Stock Assessments

Groundfish stock assessments are the technical evaluation of the status of the fish stock and the level of yield that will come closest to achieving maximum sustainable yield while avoiding overfishing. The most accurate assessments include three categories of information: (1) life history (natural mortality, growth, maturity); (2) fishery total catch; and, (3) trends in abundance from resource surveys or fishery catch per unit effort. These three types of information are complementary and all are necessary. For example, bycatch studies will improve estimates of total catch, but even perfect knowledge of total catch is not sufficient to determine if that level of total catch is appropriate. Conversely, no matter how accurately at-sea resource surveys determine trends in the level of abundance, they alone will not be able to determine if these trends are due to fishing or natural causes.

The report of the National Research Council concluded that the models used by the NMFS to conduct stock assessments were adequate, and that the primary shortcoming of the assessments was the amount of resource survey and fishery monitoring data available to include in the models. As we engage in development of the next generation of stock assessment models, primary goals will be characterization of the uncertainty in assessment results, and clarity in the communication of assessment results to fishery managers and constituents.

Resource Surveys

NOAA Fisheries has used a combination of trawl, acoustic, plankton, and fixed gear methods to provide some survey coverage for many groundfish species. Basically there is a triennial acoustic survey for whiting using the NOAA vessel *Miller Freeman;* triennial bottom trawl survey for shelf rockfish and lingcod using two chartered trawl vessels; a midwater trawl survey for young rockfish off central California using the NOAA vessel *David Starr Jordan;* an annual, but sparse, bottom trawl survey for the deepwater complex using the NOAA vessel *Miller Freeman;* incidental coverage for nearshore flatfish in the shelf rockfish survey; and no coverage for nearshore rockfish. In no case is this coverage completely adequate, and for several species it is nearly lacking.

The adequacy of survey information depends upon several factors: representation, calibration, length of time series, and degree of natural biological fluctuations. Frequent (i.e. annual) surveys are more necessary when the biology of the stock causes short-term natural fluctuations in stock abundance, or when technical or biological factors limit the precision of the survey. Here, precision refers to the degree to which each survey is expected to be perfectly representative of (i.e. proportional to) the stock's abundance. Even precise, annual surveys are of limited value until they are calibrated to the stock's abundance. In some cases, a technical approach can directly measure a calibration factor to relate the survey gear's catch to the absolute

abundance of the stock. However, this technical calibration is rarely possible. Alternatively, it is only through patient development of a long time-series of surveys that we are able to calibrate the survey index to the actual performance of the stock over time. It is important to note that the level of confidence in this calibration increases with the degree of standardization of the vessel and the sampling method.

The survey needs just described would be best met through a combination of chartered fishing vessels and a long-term, dedicated fishery research vessel (FRV). The FRV will provide all weather capability, cost effective use of scientific staff, standardized and acoustically quiet vessel operations, and capability for simultaneous multiple missions. The chartered fishing vessels will provide additional days-at-sea in coordination with the FRV to achieve adequate and timely coverage of the several groups of groundfish species. Neither a program based solely on one FRV, nor a program based solely on charter of local fishing vessels could meet the needs alone. In the absence of an improved survey program, more conservative management of the fishery will likely be necessary, and some of the potential value of this fishery will be lost. We are starting now to increase the level of survey effort based on chartered fishing vessels and using "Fish for Research" to cover some of the costs. In the long-run, an FRV will provide a stable, dedicated platform to conduct surveys and improve the inter-calibration of chartered surveys.

Fishery Monitoring

Monitoring the West Coast groundfish fishery landings is accomplished through a long standing state-Federal partnership. Funding provided through PacFIN provides NMFS, the states, and the Pacific States Marine Fisheries Commission with the capability to turn the states' fish landing receipt systems into a comprehensive fish catch database which provides weekly catch reports for major species to fishery managers. In addition, state and commission biologists sample the landings at each major port to provide biological data to stock assessment scientists, and a coastwide trawl logbook program administered by each state provides fishing effort data which figured prominently in some recent stock assessments. A separate, but coordinated, observer program administered by the Alaska Fisheries Science Center monitors the at-sea catching and processing of Pacific whiting.

As successful as this fishery monitoring program has been, major gaps remain. Opportunities for underreporting increase as portions of the fishery evolve to a highly geographically distributed hook-and-line fishery. There is no routine monitoring of discards outside of those in the at-sea whiting fishery. There is insufficient biological sampling of the landings, and little economic information collected.

CURRENT SITUATION

Stocks in Decline

Some level of decline in stock abundance is an expected consequence of fishing. The harvest policy typically used by the Pacific Fishery Management Council to set the level of ABC is one that would reduce long-term average stock abundance to about 35 percent of its average unfished level. Current knowledge indicates that this level is a reasonable approximation of the level that can produce maximum sustainable yield (MSY). Application of this approach over the past 10-20 years has been responsible for some of the decline in catch quotas as the stocks have gone from a more abundant, lightly exploited level to a fully exploited, less abundant level.

We recently discovered that several stocks (including sablefish, bocaccio, canary rockfish, lingcod) unexpectedly have not stabilized at the anticipated level of abundance and potential yield. Current estimates of low and declining levels of abundance for these stocks were completely unexpected by many who were confident the stock assessment process would guide us to sustainable harvest level. Several factors contributed to this circumstance. First, early estimates of potential yield were less accurate. As information accumulates over time, the estimates improve. In the long run (decades), we will be able to better determine the appropriateness of the 35 percent target level. Second, the current amount of survey and fishery information has now been found to be insufficient a sufficiently high degree of accuracy in tracking stock abundance trends. With only triennial updates in most stock assessments, the rate of improvement was slow, and the potential for overshooting the target abundance level was too high. Third, without a comprehensive observer program, the level of total catch is likely to have been underestimated, and this higher catch has exacerbated the decline. Fourth, over the same 20 year time period, a shift in the ocean climate has occurred. With warmer, less productive conditions prevailing off the west coast since about 1978, some of the reduction in the level of recruitment to these stocks could be part of a natural cycle.

Whatever the causes of the decline and the limitations in our ability to forecast such a decline, the best available information now indicates that some stocks are

at only 10-20 percent of their unfished level and that reductions in catch are necessary to allow rebuilding to safer and more productive levels. Furthermore, this situation illustrates the need to apply more cautious harvest levels until adequate information is available to confidently determine that a particular level of harvest is sustainable.

Excess Fishery Capacity

The number of vessels participating in the West Coast groundfish fishery was capped in 1994 with implementation of the Limited Entry program. There are now 200+ trawl permits, and approximately 300 permits for either hook and line or pot gear. Even with this system in place, the number of participants is too high to allow a year-round fishing opportunity without severely limited bi-monthly cumulative landing limits for individual vessels. Thus, the industry is actively pursuing a buyback program. We are working with the industry in the development of an industry-funded vessel buyback program.

Discarded Bycatch

A goal of the Pacific Fishery Management Council is a year-round fishing opportunity for most sectors of the fishery. Since 1983, trip landing limits have been used to cap per vessel landings to slow the rate of total landings for the entire fleet in order to sustain the year-round fishery. This system largely achieves the goal, but the limits are economically adverse to fishers, difficult to comply with and to enforce, and the cause of substantial levels of discard. Estimated levels of discard range up to 20 percent for trawl-caught sablefish, but these estimates are based on 12-year-old studies, so contemporary measurement of discard levels is badly needed. Over time these landing limits have been extended to nearly 30 combinations of species/areas/gear types. Specification of most of these limits has evolved from per trip limits to cumulative monthly and bi-monthly limits in order to provide more flexibility to vessel operations and to reduce discard. Even with these changes, the limits have become increasingly complicated and restrictive as ABCs decline and the level of capitalization by the fleet increases. This has been the impetus behind the permit buyback initiative, and has sparked a plea for implementation of a management system that would allow landing of trip limit overages.

Cooperative Industry Willing to Engage in Cooperative Data Collection

The West Coast groundfish industry recognizes the shortcomings in our stock assessment data and has been a strong proponent of cooperative research and data collection projects. Over the past few years, several workshops and discussion opportunities have helped to generate specific project ideas and to bridge the cultural gap that too often exists between the fishing and scientific communities. Development of the groundfish program in the Northwest Fisheries Science Center in 1995 increased the critical mass of NOAA Fisheries staff working on West Coast groundfish, and thus helped create an agency infrastructure to design and conduct these projects. Now the Magnuson-Steves Act has redefined the legal landscape on which we can develop these cooperative projects. An allocation of the total allowable catch can now be used to compensate vessels that are chartered to do scientific resource surveys. We look forward to using these opportunities to partner with the groundfish constituents to improve the quantity of stock assessment data, and thus to enable a less conservative harvest policy.

NEW PROGRAMS IN 1998

Resource Survey with Fish for Research

A new trawl survey will be conducted in late summer 1998 to provide additional stock assessment data for sablefish, Dover sole, and thornyheads. This survey will utilize four chartered local-sized fishing vessels to conduct the work, and will use the new Fish for Research provisions of the Magnuson-Steves Act to offset some of the direct charter costs. Such a summer survey takes advantage of better weather for smaller vessel operations and less fish movement during the survey. Results will be comparable, but not identical, with past and future slope surveys conducted in the late autumn by the NOAA vessel *Miller Freeman.*

Cooperative Fishery Data Collection

Enhanced fishery logbooks and at-sea biological data collection by cooperating fishers can improve stock assessments. The enhanced logbook project will allow collection of more detailed data from cooperating fishers. It will provide fishers an opportunity to report on factors that influence their fishing patterns, and the frequent interaction with these participants will greatly improve communication between the agency and the industry. Year-round biological sampling from a range of fishing depths cannot be obtained from traditional shortage sampling programs. This infor-

mation can be efficiently obtained through cooperation with the industry, and will be important for analysis of fishery logbook data and for interpretation of surveys that are conducted in only one season.

Improved Stock Assessment Models

Stock assessments will be improved immediately. First, we are implementing recommended improvements in the stock assessment model from the National Research Council review. This will allow a clearer presentation of uncertainty in model results which will enable better understanding of the benefits of a precautionary management approach. Second, we will ensure improved access to stock assessment databases and increased frequency of stock assessment updates. In particular, we will update in 1998 the sablefish and shortspine thornyhead assessments and will initiate studies to provide further improvements in the future. Third, we are improving coordination and communication of all West Coast groundfish stock assessments to improve public understanding and trust in the assessment process.

Electronic Fish Catch Logbook

A project funded by the Innovative Technology Committee is designed to develop and demonstrate an electronic fish catch logbook system. The system will allow for collection and analysis of fish catch and related information collected by fishers. The goal is to increase the quantity and quality of data collected, increase the uses of the data, and better coordinate the expression of the data for more efficient and sustainable utilization and management of the fishery resource. The core products of the project are technology development and demonstration. The first stage of the project involved interviews and workshops with West Coast groundfish fishers, processors, scientists, and managers to determine the unmet needs.

OUTSTANDING RESEARCH AND MANAGEMENT NEEDS

We conclude by providing a brief recap of the major research and management needs for West Coast groundfish. Each of these is designed to bring us closer to our goal of fisheries managed to provide maximum benefit to the nation with minimum risk of overfishing. Such a dual goal cannot be achieved without good information. West Coast groundfish can be a valuable, sustainable fishery if we can:

1. Provide adequate monitoring of trends in all groundfish species through annual resource surveys for each of the five major groups of groundfish. A combination of chartered fishing vessels and a dedicated Fishery Research Vessel is the best mix to accomplish this need.
2. Expand upon the resource surveys and oceanographic studies to provide advance prediction of future recruitment to these groundfish stocks.
3. Measure the contemporary level of bycatch in the groundfish fishery.
4. Increase the accuracy of fishery monitoring through logbooks, port sampling, and other means. Involve industry in cooperative projects to leverage these fishery monitoring programs.
5. Increase the level of economic information collected from the groundfish fishery so that impact of trade-offs in management can be more fully evaluated.
6. Improve the capabilities of stock assessment models so that fishery managers and constituents will be more fully informed of the potential benefits and risks of alternative levels of harvest.
7. Implement capacity reduction programs that will improve the economic, social, and biological situation of the West Coast groundfish fishery.
8. Review management objectives for the fisher and develop management programs that reduce bycatch.
9. Implement all aspects of the Magnuson-Stevens Sustainable Fisheries Act, including provisions regarding prevention of overfishing, bycatch, and essential fish habitat.

Mr. Chairman, this concludes my testimony. I again thank you for the chance to appear here today and I welcome any questions you may have.

STATEMENT OF PHILIP ANDERSON, MEMBER, PACIFIC FISHERY MANAGEMENT COUNCIL

Good morning. My name is Philip Anderson. I represent the Washington Department of Fish and Wildlife on the Pacific Fishery Management Council (Council) and I am here on behalf of the Council today. Thank you for inviting us to testify on the issues of groundfish management and research.

Background

The Council and the National Marine Fisheries Service (NMFS) manage the groundfish fishery consistent with the Pacific Coast Groundfish Fishery Manage-

ment Plan which was implemented in 1982 and has been amended ten times. The management unit consists of 83 species of flatfish, rockfish, roundfish, sharks, skates, raffish, morids, and grenadiers. The more important commercially harvested species include Dover sole, sablefish, Pacific whiting, and various species of rockfish. The amount of recreational catches of most groundfish species is small compared to commercial catches. Most of the commercial catch is taken by trawl, longline, and pot gear in the limited entry fishery with trawl gear accounting for over 90 percent of the catch. There is also an open access fishery with relatively small catches by a large number of vessels.

Management measures, including mesh-size restrictions and harvest limits, for major species are established each fall for the following fishing year. Most harvest limits are based on stock assessments which are written by NMFS, a state agency, or university scientists, and are based on trawl surveys conducted by NMFS, and data from the fisheries. The trawl fisheries, other than whiting, are managed to extend landings throughout the year as much as possible by setting bimonthly cumulative limits per vessel and adjusting them as necessary during the season.

In 1994, a license limitation program was implemented for trawl, longline, and pot gears in an effort to control the amount of growth in the number of vessels participating in the fishery. However, the harvest capacity still exceeds what is needed to harvest the allowable catches. The shoreside processing sector is also overcapitalized which creates less-than-optimum economic conditions in the fishery and intense competition for the fish.

In response to these conditions, the Council has discussed additional measures to reduce fishing effort and to directly allocate certain species among competing gear groups and certain treaty tribes. Direct allocations have been adopted for Pacific whiting and sablefish. Sablefish is allocated between trawl and fixed gear fisheries, and additional measures have been adopted for the fixed gear segment to limit capacity and allocate the fixed gear share among participants. Recent declines in annual harvest limits and bimonthly cumulative limits have greatly exacerbated the situation, and allocations are being considered for rockfish and lingcod. These measures, however, will not solve the fundamental problem of excess capacity.

An individual quota program for the fixed gear sablefish fishery was developed, but was abandoned in 1994 when Congressional sentiment in opposition became evident. Individual quotas are now prohibited by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Stevens Act). A trawl permit buyback program is being considered by the Council, which has the potential to directly reduce capacity in the trawl fleet. This program was developed by trawlers and would be funded by a self-imposed tax on trawl landings if approved by the fleet in a referendum pursuant to the new provisions of the Magnuson-Stevens Act. Reduction of capacity is a high priority for the Council.

1997 Stock Assessments and Decisions

Each year, assessments are conducted on five to ten species, typically as part of a three-year rotation, and Pacific whiting is assessed every year. Stock assessments are prepared by staff scientists of NMFS, California Department of Fish and Game, Oregon Department of Fish and Wildlife, Washington Department of Fish and Wildlife, and Oregon State University. In 1997, new assessments were completed for Pacific whiting, yellowtail rockfish, lingcod, widow rockfish, Dover sole, sablefish, and the two thornyhead rockfish species (longspine and shortspine).

In recent years, stock assessments of West Coast groundfish have generally been conducted with the stock synthesis model which allows simultaneous examination of information from a number of different fisheries and surveys. The surveys are largely conducted by NMFS and include the following:

- Triennial acoustic/mid-water trawl survey of whiting
- Triennial bottom trawl survey on the continental shelf to assess rockfish, lingcod, young sablefish, and other species
- Annual bottom trawl survey of the continental slope to assess deepwater species such as Dover sole, sablefish, and thornyheads
- Pot survey for sablefish

Except for the pot survey which was discontinued, all of these surveys will be conducted in 1998. The trawl surveys of the shelf and slope will be conducted using chartered commercial fishing vessels, while the acoustic survey will use the NOM ship *Miller Freeman.*

The assessments for the deepwater species were reviewed by a panel of independent experts in 1995. The panel was critical of the slope surveys which were used as a basis for assessment of these species. Since 1995, NMFS has made significant efforts to improve the slope survey. Given the limited amount of funding resources available and the technological difficulties of estimating the biomass of groundfish

species, survey and assessment results are often accompanied by a substantial amount of uncertainty.

In 1996, the Council implemented a new stock assessment process to improve public participation in the process, increase the level of scientific peer review, and provide greater separation between the scientific and management processes. This procedure was reconsidered and expanded for the 1997 assessment cycle. In April 1997, a pre-assessment workshop was held to review and evaluate data and identify problems and modeling assumptions. Stock assessments were prepared by Stock Assessment Teams (STATs) and then reviewed by three Stock Assessment Review (STAR) Panels at three week-long workshops in July. The STAR Panel workshops were open to the public. The Council's Groundfish Management Team then met with the STAR Panel and STAT Team representatives and developed recommendations to the Council for annual harvest limits. The 1997 process was a substantial improvement over the previous year's, but several problems were identified during its implementation in 1997. The Council made further improvements to the process for 1998 which addressed these problem areas.

Based on the new estimates of biomass from the 1997 stock assessments, the recommended harvest levels were significantly reduced for some species:

- Sablefish reduced from 7,800 mt to 4,680 mt.
- Dover sole reduced from 11,050 mt to 8,955 mt.
- Longspine thornyhead reduced from 6,000 mt to 3,733 mt.
- Widow rockfish reduced from 6,500 mt to 4,276 mt.
- Lingcod reduced from 2,400 mt to 838 mt.

In addition, a substantial reduction in the harvest limit for shortspine thornyhead was proposed by the STAR panel, but the Council believed the assessment should be rewritten to address numerous questions raised by both scientists and the public. The harvest levels adopted for 1998 are very similar to the 1997 levels.

The total ex-vessel (landed) values of the species for which harvest levels were changed in 1998 have declined from $59.8 million in 1996 to $55.4 million in 1997 (preliminary), and are projected to decrease to $41.4 million in 1998. These substantial reductions in revenue are occurring in an industry that is already overcapitalized which will further aggravate its depressed economic condition.

The industry was particularly surprised and skeptical of the 1997 sablefish stock assessment. The assessment used information from the slope surveys, pot surveys, and trawl logbooks and several different model runs which emphasized different types of data sources which produced a wide range of possible harvest levels. Problems have been identified with all of the data sources, and there is a substantial amount of uncertainty regarding sablefish abundance. Reasons for the dramatic change in estimated biomass levels between the current and previous assessment are not clear. Recruitment of new fish into the population appears to have been poor since 1992, which may be caused by environmental conditions, but may also be a result of low stock size. Given the concerns relative to the 1997 sablefish assessment, the Council requested a re-assessment in 1998 using the most recent survey data and additional sources of information.

While some resource decline was expected as stocks were fished down to levels which would provide the maximum sustainable yield (MSY), the results of the 1997 assessments still raise a number of questions about the adequacy of science and management. Did the previous assessments overestimate abundance, resulting in harvests which were too high? Are recent assessments sound? Are environmental conditions in the ocean largely responsible? Are trip limit- induced discard rates higher than estimated? The industry has been harvesting at the levels adopted by the Council and implemented by NMFS, yet significant declines in resource abundance appear to have occurred. For assessed species, the Council has been setting harvest limits based on assessment results and by applying the exploitation rate that is expected to achieve MSY.

Recommendations

The Council makes the following recommendations to improve research and management of West Coast groundfish:

Increase the accuracy of stock assessments for West Coast groundfish

Reducing uncertainty involves improving the science through increasing the number of observations and thereby improving accuracy. NMFS should increase the frequency and coverage of surveys to measure adult biomass and the magnitude of the recruitment of incoming year-classes. Surveys need to be done annually at a minimum, and need to cover the entire range of the species. We appreciate the commitments made by NMFS Director Rolland Schmitten to permanently add $750,000 to the base budget of the Northwest Fisheries Science Center for this purpose, in addition to the $400,000 provided for 1997 only. We

also appreciate the efforts of the West Coast Senate delegation and especially Senator Ron Wyden for requesting additional amounts beginning in fiscal year (FY) 1999.

As an integral part of the effort to improve science, the Council supports cooperative agency/industry research projects. The industry has proposed a number of such projects, and NMFS is beginning to implement some of them this year. In particular, the "Fish for Research" program authorized by recent amendments to the Magnuson-Stevens Act has the potential to collect needed information at less cost, and starting this summer, NMFS will contract with commercial vessels to conduct the slope survey. The vessels will be reimbursed with a combination of cash, fish caught during the survey, and fish caught after the survey under an exempted fishing permit.

Improving science will go a long way toward establishing credibility of the stock assessments, but it is also important to improve the stock assessment process so that the Council members and the stakeholders have confidence in the results. This year, the Council and the state and Federal agencies have committed to an improved process which was adopted by the Council at its March 1998 meeting and is currently underway.

Be precautionary

Even with improved science, there will continue to be more uncertainty in biomass estimates and stock assessments than decision-makers are comfortable with. Estimating abundances of marine fish species is challenging at best since we cannot observe the fishery resources directly and it is difficult to sample them. Some species of rockfish are particularly difficult to survey and assess primarily because of their slow growth rates, longevity, and geographic distribution. It is entirely possible that the recent stock assessments are indeed accurate. Other than for sablefish and shortspine thornyhead, there was little disagreement over stock assessment results. Given the uncertainty of the stock assessment and the possibility of low stock sizes, it is prudent for the Council to be precautionary in setting harvest levels on these resources which can take decades to rebuild.

As part of the effort to amend the groundfish plan to make it consistent with new provisions of the Magnuson-Stevens Act, the Council is examining a more conservative harvest policy. Under this policy, exploitation rates would be reduced as biomass levels decrease, and rates would be adjusted downward to deal with uncertainty. This policy, if approved, should provide for more stable and abundant populations for the future.

Reduce effort

Fishing and processing capacity is larger than necessary to harvest and process the available groundfish and the recent reductions in harvest limits have exacerbated the situation. License limitation programs and allocation regimes have not solved this fundamental problem and additional measures are necessary to achieve a stable and economically healthy industry. The trawl permit buyback program being developed by the industry is an example of a more direct way to address excess harvest capacity. The program as drafted has caused some concern regarding impacts to other fisheries; however, the trawl fleet should be commended for taking the initiative to develop this program. The Council is continuing to work with the industry on this program and will address it again at its June meeting.

Individual quotas are another means of addressing allocation and effort problems. This tool is presently not available to the Council. When the moratorium on individual quotas has expired, I expect the Council to evaluate individual quotas for certain fisheries such as sablefish.

Improve estimates of total fishing mortality and reduce discards

Groundfish caught in excess of cumulative vessel limits must be discarded. These regulatory discards most likely increase as limits decrease, but we do not know the true magnitude of discard mortality. Assumed levels of discards are based upon limited and outdated field studies. It is critical that we have reliable estimates of discard mortality in order to incorporate accurate estimates of total fishing mortality into stock assessments as well as evaluate the impact of our management measures upon discard levels. A comprehensive, ongoing observer program and alternative ways of collecting this information are being considered. One of the obstacles to establishing an observer program is funding. Federal funding is not available at this time and charging a fee and spreading the cost of a program throughout the groundfish industry is not authorized by the Magnuson-Stevens Act. These limitations have prevented the Council from pursuing an observer program in the past.

One alternative being discussed is to require vessels to land all catches of cumulative limit species. The fishers would not be penalized for exceeding the limit nor would they be compensated for the overage. Monies from overages would be deposited in a fund to help defray the cost of research programs. Such a program could achieve multiple objectives by reducing waste, improving estimation of total catch, and providing funds for needed fishery programs, but a mandatory program requires amendment to the Magnuson-Stevens Act, and it also raises a number of concerns. The Council continues to examine this concept.

This concludes our testimony and thank you for this opportunity.

STATEMENT OF GERALD GUNNARI, PRESIDENT, COOS BAY TRAWLERS' ASSOCIATION, INC.

I have been asked to give testimony on the science used by the Pacific Council to make management decisions and the adequacy of the data used to establish quota levels on the west coast groundfish. I thank each of you for this opportunity.

The Sustainable Fisheries Act calls for measures to reduce discards and not to manage a complex or multi-species fishery by lowering one species in that fishery. Doing so **creates** discards, not reduces it! This is exactly what NMFS **IS** doing. Currently the NMFS' interpretation of uncertainty and the precautionary approach is when you don't know enough about a specie it is to automatically reduce the landings of that specie no matter what condition the stock is in. This practice is destroying the ability of the west coast fleet to be good stewards of the ocean forcing discards we have never had in the past. Example: Lingcod from December 31, 1997 to January, 1998 our monthly quota went from 20,000 lbs. to 500 lbs. a 97.5 percent reduction in landings. The commercial sector went from harvesting 95 percent of all Lingcod to less than 50 percent. This shift made by NMFS and PFMC is undoubtably an illegal allocation. Shifting to sports from commercial fishers means that a seventy-five foot vessel can now only produce 150 pounds of filets per month creating discards we never had before and denying the public access to eat Lingcod.

On top of all this, we are not seeing the reported decline in fish out on the ocean. There are no surveys or actual accounting of Lingcod inside 30Fm out here, now over 50 percent of the 1998 quota is being taken from an assessed area from an area **not** assessed. 98 percent of the Lingcod caught by sport fishers is from inside 30Fm and very little commercially caught ling is from inside 30Fm. We do not have a sport/commercial conflict on the ocean. However, we **now** have one in council's meeting rooms and it's not very pretty.

In the most recent PFMC meeting in Portland the desperation of not enough fish to pay the bills is becoming a dominant issue for many. The organized attitudes of one gear group throwing as much mud and dirt upon another gear group to sway the council to take fish from one group, who have traditionally caught those fish and give it to their groups. These are some tough issues to have to deal with. We all have to understand with financial pressures, fellow fishers have no other recourse than to turn on each other. It is the only way some of them can figure out how to increase their landings in order to survive.

We get our fish the same way they get their fish, we earn it by working hard, investing in our vessels, and putting in time over the years. The current situation is killing us too, but trying to steal someone else's fish and investment is not an acceptable solution.

The trawl fishery is the mainstay of supplying our nation's fish markets and restaurants with a steady source of fresh west coast fish in the past and hopefully in the future. Investments and our bills are many times greater than other gear types. It costs a lot to maintain a vessel and crew capable of fishing forty miles off shore in the dead of winter. These bills are real and we support many of the business in our coastal communities. These cutbacks are proportionately affecting our abilities to pay our bills too. It is destroying generations of hard work and the very infrastructure dependent on fishing. We're not attacking their business practices, they're attacking ours.

Over the past decade or more, we've been reducing catches and the number of vessels doing what NMFS has recommended and now another surprise cut by 40 to 60 percent and over 97.5 percent on Lingcod. It is now to the point that we have an East Coast style disaster here, not due to real stock abundance levels but due to poor science creating uncertainty in data causing regulation changes. If we are catching 60 percent of 2 months trip limits of Dover Sole in 35 minutes of fishing time or have problems with avoiding abundant Sablefish and can only produce 150 pounds of Lingcod filets per month, it is not a stock biomass problem.

Essential Fish Habitat seem's to be the new growing buzz word; refuges, deep sea ocean parks, NO TAKE FISHING RESERVES, and on and on. Sounds great but where will it end? My natural concern is: Who will it effect?; Are they needed?; Will it concentrate effort to smaller and smaller areas?

Important habitat must mean where the fish are. Who and how will this information be determined? Obviously fishermen's own log books are the easiest source to gather this information and HAS ALREADY BEEN COLLECTED BY THE GROUPS WHO ARE PUSHING THESE IDEAS. What concern's me is the only information being collected by officials is from the trawl fleet. NO OTHER GEAR TYPES or EVEN THE SPORT FISHERS ARE SCRUTINIZED FOR DATA COLLECTION. So their important fishing areas are potentially not effected. Area closures will concentrate effort into smaller and smaller areas creating conflicts with gear types and sport and commercial. If commercial fishermen can no longer fish where they have been fishing they'll have to find new spots. This is not beneficial to the resource or the users.

Trawlers' have been fishing off our west coast over sixty years and we go back to the same places over and over again. If we were destroying important fish habitat, we would NOT still be fishing there. Off shore marine sanctuaries, no fishing zones, potentially 20 square miles to me is a very serious concern being that our information is the only information. We have years of time and thousands of dollars invested in developing trails and areas we fish today. Will traditional users of a now closed area be compensated? It would be no different than closing off city blocks from people doing business after they have invested in their businesses there. At night, we drift sometime over twenty miles or if we're passing through one of these areas and are just accused of being in an area illegally the legal costs could be financially devastating. The people who come up with these ideas are not effected by the outcomes.

Solutions:

- Better data is needed in order to reduce the uncertainty, assessment authors should have to be involved personally in the harvest of the species they assess.
- Vessels involved in these fisheries already are capable and willing to be included in gathering data.
- Coded wire tagging with tetracycline projects is the cheapest and, the fastest solution to the aging problem, migration patterns and percentages of removals from a given stock. Thorny heads and Sablefish need this now and it has been recommended to NMFS since 1993. Local vessels are capable of carrying out this project while fishing.
- Larval studies-recruitment estimates are extremely important we found out from this last round of cuts on Sablefish in particular. NMFS made no observations of recruits so they assumed that there weren't any. This is valuable information not being done now, local vessels are capable of this work for the best value.
- Annual trawl surveys from 10 fm to 1,000 fm using local vessels. This is the most reasonable costs for the return.
- Long Line surveys should be conducted every year. These will pay for themselves, Alaska is doing this now.
- Oceanic conditions should be monitored carefully as to migration patterns due to environment conditions such water temperature, etc
- Fish for research to help in funding cooperative projects.
- Improve the lines of communications. Attempts by industry to provide NMFS with coastal meetings have been boycotted in the past by NMFS. Another attempt is underway at this time and has been put off by NMFS. Now NMFS says it is not needed. This is not cooperation in management and must be rectified. Deputy Secretary Garcia assured us February 19, 1998, what is happening now will not happen. It is now April 25, 1998 our attempts to help reduce uncertainty in the data through an industry based meeting is receiving negative support from NMFS.
- We need true outside peer reviews, The NMFS, STAR, SAT reviews are NOT an outside peer review. The west coast seafood industry has been forced to organize a true outside international review panel, and are currently looking at Sablefish and Thornyheads. LET'S MAKE SURE THESE EFFORTS ARE NOT STOPPED AS WELL.
- International exchange of ideas, methodologies and advice is desperately needed on the west coast to help rationally utilize our fishery resources. Work is now well underway to put together such a meeting. The date and location and international participants have already been arraigned and now Dr. Richard Methot's group is trying to stop this exchange. Why?

STATEMENT OF KAREN GARRISON, NATURAL RESOURCES DEFENSE COUNCIL

My name is Karen Garrison. I am Co-Director of the Natural Resources Defense Council's Ocean Protection Initiative. NRDC is a national environmental organization with about 350,000 members. We have a long-term commitment to protecting the diversity of species and habitats in the ocean and encouraging stewardship of living marine resources. NRDC collaborates with the Center for Marine Conservation, the Environmental Defense Fund, and the National Audubon Society in much of our Pacific marine work. We appreciate the interest of the Resources Committee in the management of Pacific Groundfish, and the opportunity to speak here today.

Your hearing addresses questions that are critical for Pacific groundfish, but are also broadly relevant for other fisheries around the country. In this International Year of the Oceans, we encourage your support for improving conservation of these important resources, through better science and other tools. At the end of this testimony is a ten point action agenda developed to encourage a conservation focus for the Year of the Oceans. Several of its points offer useful guidance for West Coast groundfish, as well as the management of ocean activities nationwide. We will provide details on request.

A year and a half ago, most species of Pacific groundfish—the highest value commercial fishery in the Pacific Exclusive Economic Zone—were considered relatively healthy. That picture changed dramatically with last year's stock assessments. Coupled with other warning signs, such as trends toward smaller average fish size and a halving of groundfish landings (other than Pacific whiting) over the past two decades, the National Marine Fisheries Service's 1997 stock assessments tell a disturbing story: nine of the fifteen most valuable groundfish species in the region are now at a small fraction of their historic levels. One species is still depleted despite a 20-year "rebuilding" effort.

This news underscores the importance of new measures required or encouraged by the Magnuson-Stevens Act, including steps to avoid overfishing, minimize bycatch, protect habitat, and retire excess capacity from the fishing fleet. But it also underscores the shaky nature of our information on groundfish. Why did some of this news come as a sudden revelation? How can we avoid such surprises in the future?

Need for Better Data and a Precautionary Approach

Part of the answer lies in providing better survey information and analysis. Data are limited even for the 15 groundfish species NMFS assesses in detail. Key pieces of information, such as accurate assessments of bycatch, are missing.

Furthermore, fully 68 of the groundfish species managed by the Pacific Fishery Management Council (PFMC or Council) are of unknown status, because we have little information about their abundance or how they are affected by fishing. Yet fishing is allowed on these species as if we were sure they were in good shape. Some of these stocks, like the group called "near shore rockfish," now support lucrative and rapidly growing fisheries. In cases like this one, the combination of lack of data and lack of management caution could be disastrous.

A proposal from NMFS' annual stock assessment workshop to conduct a stock assessment of the near shore rockfish group in 1999 deserves Congress' strong support, as do proposals to assess all other groundfish at whatever level is feasible. In the meantime, steps should be taken to limit fishing in cases where problems are indicated or suspected.

An equally important part of the answer, however, lies in finding less risky ways to deal with uncertainty. Our ability to understand the abundance and reproductive rate of most ocean species will always be subject to uncertainty. Groundfish, and particularly the reclusive rockfish, are notoriously difficult to sample accurately. A standard response in the past has been to put the most positive possible face on the data, from the perspective of someone who wants the biggest possible catch. The phrase "conspiracy of optimism," coined for other resource issues, aptly describes what happens in fisheries. When managers and scientists routinely downplay uncertainty and interpret data too hopefully, it should come as no surprise that groundfish depletions were discovered only after the populations had taken a huge dive. By then, the necessary catch cuts took a heavy toll on the fishing community.

Sablefish provide a useful example of how easy it is for estimates of population size to be wrong. For many years, managers set what they thought were protective catch limits. But as more data were collected, it became apparent that the abundance estimates, on which catch limits are based, had been wrong for about two decades. Managers had been protecting paper fish. The main error lay in managing as if the information was certain, when it was not. Scientists need to be clear about the extent of uncertainty, and managers need to be more cautious until more infor-

mation is available. As recently as last year, however, when scientists acknowledged uncertainty in the data and recommended cuts in catches of two deepwater groundfish, the PFMC failed to heed their advice.

Uncertainty also exists because fish populations wax and wane under the influence of long-term fluctuations in ocean temperatures and other environmental conditions. The effects of these shifts are often difficult to distinguish from the effects of fishing. But unless management takes this uncertainty into account, the combination of fishing and climate impacts can cause deep depletions.

The Magnuson-Stevens Act aims to reduce these kinds of risks by instructing managers to take uncertainty into account. That shift will not come easily. Congress' full support of the precautionary approach implied in that provision is essential if the Councils are to avoid painful surprises in the future.

In many parts of the world, no-fishing reserves are being used as a means of ensuring that baseline information is available, boosting vulnerable populations in mixed stock fisheries, and providing insurance in the face of uncertain information. Several small reserves in state waters on the Pacific Coast have demonstrated their value as havens where fish can grow large and highly productive. NRDC urges your support for the Council's use of reserves as a tool for groundfish management and habitat protection.

Although the main focus of this hearing, and our testimony, is the adequacy of groundfish data and assessments, the PFMC faces several intertwined management challenges. We address those issues briefly below.

Reducing Overcapacity

No controls were placed on entry or capitalization as American boats took over from foreign fleets in the late 1980s and new markets developed for groundfish species. As a result, the top problem in the groundfish fishery today, besides the uncertainty of our knowledge about them, is overcapitalization of the fleet. A limited-entry program adopted in 1994 to address excess capacity has not sufficiently decreased the number of participants or the amount of fishing power aimed at these fish. Excess capacity can encourage high bycatch levels, create pressure to ignore warning signs and to overfish, and make it difficult for people in the industry to make a living.

To be effective, buy-back and gear-limiting programs aimed at solving this problem must meet certain standards. Such programs must prevent the replacement of the removed capacity through a moratorium on new entrants, restrictions on vessel upgrades, and other effort control measures, as required by the Magnuson-Stevens Act (See 312. (b)(l)(B)(i)). They should ease the economic strain on those who remain in the fishery, but, consistent with National Standard 5 of Magnuson-Stevens, should also serve a conservation function, relieving the excess pressure on the resource.[1] They should avoid intensifying the pressure on other fisheries. And, as recommended by the Pacific Marine Conservation Council (PMCC), an organization of commercial and recreational fishers, marine scientists and conservationists, such programs should have clear goals that can be evaluated.

Judging by those standards, the buy-back proposal currently before the PFMC has serious flaws. It would purchase permits, not boats, leaving open the possibility that the retired capacity could in fact enter other fisheries. That poses a serious problem, since virtually all West Coast fisheries are overcapitalized. Key fisheries like squid and crab have no entry limits, thus are targets for excess capacity. Nor does the proposal adequately guard against vessel and gear upgrades in the remaining fleet. Without such limits, overcapacity is likely to recur in the groundfish fleet, and no conservation purpose will be served. All parties should work together to make sure a Pacific groundfish buy-back program complies with Magnuson-Stevens, setting the right precedent as one of the first under the Act. We agree with PMCC and the Pacific Coast Federation of Fishermen's Associations that an effective program *must remove vessels from the fleet.*

Minimizing Bycatch

Bycatch rates average about 30 percent for the Pacific groundfish trawl fleet. Many groundfish are long-lived and can support only low harvest rates, yet they often mix with shorter-lived species. Managers face the challenge of devising controls that protect low productivity species, while allowing full catch of high productivity ones. The current high rates of bycatch intensify the pressure on vulnerable

[1] National Standard 5 says conservation and management measures shall consider efficient utilization of fishery resources, except that no such measure shall have economic allocation as its sole purpose.

species, while measures that reward clean fishing and reduce bycatch rates can help relieve that pressure.

Mandatory observer programs are a first critical step toward obtaining accurate assessments of bycatch. Such programs should provide representative coverage of the whole fleet, while spreading the industry share of the cost proportionally to revenue generated. To minimize bycatch, as required by Magnuson-Stevens, the current system that spreads fishing throughout the year may need to be modified, since the resulting low trip limits encourage unacceptably high rates of bycatch. Other bycatch reduction options include time and area restrictions, gear modifications, and incentives for clean fishing. The Council should encourage efforts like Oregon's voluntary program to reduce bycatch of rockfish in the shrimp fishery through the use of fish excluder devices.

Requirements that all bycatch be retained, when coupled with an observer program, can be an incentive to reduce unintended catch. But to avoid institutionalizing bycatch, full retention should be required, not just retention of the marketable portion of the catch. There may be potential to generate funds in the short-term by processing retained bycatch, but minimizing the bycatch must be the primary goal. The focus of the program should be on rewarding vessel operators who achieve consistently low bycatch levels, through revocable exemptions from observer coverage, extended fishing seasons, or other means.

Habitat Protection

Another challenge facing the Council is the need to protect essential habitat for groundfish. Of particular concern on the West Coast is the long-term effects of recently introduced roller gear. This gear allows trawl nets to maneuver in formerly inaccessible rocky ocean floor, and is believed to pose a threat to valuable rockfish habitat. NMFS has proposed a range of measures to address these issues, including the development of a framework fish management plan amendment that could include the use of marine ecological reserves. We urge Congress to support the use of innovative strategies by the Council and NMFS to protect spawning and breeding grounds and other essential habitat for groundfish.

Year of the Ocean Recommendations

We urge you to consider and support the steps summarized below:

1. Review America's efforts to conserve its ocean waters and wildlife.
2. Protect and restore America's ocean waters.
3. Expand marine protected areas.
4. Protect America's coral reefs.
5. Invest in the future of America's oceans.
6. Revitalize America's marine fisheries.
7. Protect endangered marine wildlife.
8. Take stock of America's marine wildlife and ocean waters.
9. Promote ocean stewardship and education.
10. Spur international efforts to protect the oceans.

Conclusion

The declines of Pacific groundfish present West Coast fishery managers with a major challenge. We commend the Council and NMFS for taking the first important step toward meeting that challenge last year, by promptly cutting catches for most of the depleted populations and securing additional funds to improve data collection.

We urge Congress to support a number of additional steps we believe will help avoid similar surprises in the future, and lay the groundwork for rebuilding these fisheries. Information-related measures include: additional funding for groundfish data collection and assessment; an intensified effort to assess the status of groundfish stocks (of known and unknown status); a strong commitment to the precautionary approach in interpreting the data and applying it in management decisions; and development of a mandatory observer program to assess bycatch levels.

Conservation measures will also be essential. They should include the development of a buy-back proposal that removes vessels and serves a conservation as well as an economic purpose; adoption of bycatch minimization measures; and creation of pilot marine reserves aimed at protecting groundfish habitat, providing baseline information, and helping rebuild depleted fish populations. Thank you for the opportunity to testify.

STATEMENT OF CHRIS BLACKBURN, DIRECTOR, ALASKA GROUNDFISH DATA BANK

Thank you for the opportunity to comment on West Coast Groundfish issues. The Alaska Groundfish Data Bank (AGDB), located in Kodiak, Alaska, represents

groundfish fishermen and processors operating primarily in the central Gulf of Alaska. A central mission of the AGDB is improvements in stock assessment and applied fishery science.

Our comments will address issues germane to Alaska resource surveys and stock assessments, research vessel needs, and resource utilization. Adequate funding levels and research efforts in each of these areas are necessary to meet requirements under the Magnuson-Stevens Act, and to provide an effective, comprehensive management program for northwest marine resources.

Surveys and Stock Assessments

Currently, NMFS annually surveys in March one pollock spawning biomass (the Shelikof Strait pollock spawning aggregation) in the Gulf of Alaska using hydroacoustic technology to determine stock size. During alternating years, NMFS expands the survey to more closely examine biomass in a single spawning aggregation in the Western Gulf. However, there are additional spawning aggregations in the Eastern Gulf and the East Side of Kodiak Island, the size of which remain unquantifiable.

The health of these additional aggregations could be determined by expanding the survey to include one new area each year. Thus, each aggregation would be surveyed every third year while the Shelikof survey would continue on an annual basis. These additional surveys are essential to developing a comprehensive understanding of pollock biomass.

Furthermore, NMFS surveys Gulf Groundfish via a summer triennial bottom trawl survey. Unfortunately, the survey has suffered long term attrition under fiscal constraints, sampling fewer stations at more inshore locations. This has resulted in surveys that are not sufficient to monitor the populations status of pollock, cod, rockfish and other groundfish in the near shore and deep water areas.

In the Bering Sea/Aleutians (BSA) area, NMFS currently conducts annual summer hydroacoustic surveys on pollock spawning biomass, along with an annual bottom trawl survey targeting crab stocks. In addition, NMFS conducts groundfish surveys once every three years, a protocol similar to the Gulf area. Likewise, AGDB remains concerned that triennial surveys are not sufficient to facilitate a sound management program. We also suggest increasing the groundfish survey periodicity to a biennial program to improve our conservation potential.

We urge the Subcommittee to recognize the lack of stock status information and long term implications on groundfish fisheries and take steps necessary to address these concerns. AGDB is seeking to improve fish stock assessment programs by increasing the frequency of the surveys from once every three years ("triennial") to once every two years ("biennial"), and adding information from locations not currently being surveyed. We believe that improved stock assessments will reduce the potential of overfishing and, for some poorly assessed species, increase the allowable quotas, increasing economic activities for fishing communities throughout the GOA.

Research Vessels

NMFS employs the Research Vessel (RV) Miller Freeman for hydroacoustic surveys in the GOA. The vessel is uniquely suited for this type of research compared to commercial fishing vessels which lack the appropriate equipment or design to conduct sonar surveys. Hence, the RV Miller Freeman is a critical component of the fisheries research program off Alaska.

Currently, the RV Miller Freeman is in need of shipyard repairs. It is essential that funding be available to ensure this vessel, or one with similar capabilities, is continually available to conduct the necessary pollock surveys in the GOA. We urge the Subcommittee to recognize the value of maintaining this vessel.

In addition, NMFS actively charters commercial fishing vessels to conduct groundfish bottom trawl surveys in the GOA. The AGDB recognizes NMFS' efforts in this regard and encourages this cooperative activity as it provides employment opportunity and brings fishermen directly into the management process. We believe NMFS should aggressively use the competitive procurement process to supplement the West Coast fisheries research activities.

Resource Utilization

In the past, NMFS staff in the northwest and Alaska regions were very active in the area of utilization, devoting considerable effort into improving fish waste systems, product stability, and increasing the value of fish meal. However, research and development in the area of utilization has received short shrift during the recent period of shrinking budgets.

Ironically, utilization has become more of an issue subsequent to the reauthorization of the Magnuson-Stevens Act which is clear in requiring reduced bycatch and efficient utilization of marine resources. Accordingly, NMFS has issued regulations

mandating increased efficiency in the area of utilization. AGDB is concerned that reduced Federal funding will impede the industry's ability to develop new ways to meet increased these increased demands.

The industry has stepped in to fill the void left by NMFS and is working proactively to address improved utilization. Recently, the National Fisheries Institute, filed a petition with the Food and Drug Administration (FDA) to allow processors to carry just one type of packaging for multi-species use in the formulation of surimi. If successful, processors would increase their efficiency by using several finfish species to make surimi, rather than using just one species and then having to process others differently. We understand the FDA is moving very slowly if at all, and any support the Subcommittee can provide to move this issue along will be extremely helpful.

Furthermore, AGDB is supporting the efforts of the Fishery Industrial Technology Center at the University of Alaska Fairbanks to improve industry's utilization of fish resources. The Center currently has funding requests into the Department of Agriculture for several projects designed to efficiently handle fish-byproducts and develop new value-added products. Here again, the industry could use the help of this Subcommittee to ensure these proposals are given due consideration.

Thank you for the opportunity to comment on these critical programs. Please do not hesitate to contact the Alaska Groundfish Data Bank should you our the members of the Subcommittee have any questions.

Testimony to the House Subcommittee on Fisheries
Conservation, Wildlife and Oceans

West Coast Groundfish Assessment and Management

David B. Sampson, PhD

Associate Professor of Fisheries
Oregon State University
Coastal Oregon Marine Experiment Station
and Department of Fisheries & Wildlife

Relevant Background:

- Member since 1993 of the Scientific and Statistical Committee for the Pacific Fishery Management Council (PFMC).
- Conducts stock assessments for the PFMC on behalf of the Oregon Department of Fish and Wildlife.
- Conducts Sea Grant funded research on the accuracy of stock assessments.
- Published journal articles on stock assessment methodology.
- Teaches undergraduate/graduate courses in population dynamics, marine fisheries, and stock assessment.
- BA from Stanford University, MS from the University of Washington, PhD from the University of London.

The Problem of Fisheries Management.

"What you catch today won't be able to spawn and produce offspring tomorrow"

versus

"You can't sell (and people can't eat) fish you don't catch; what you don't catch today may or may not produce offspring tomorrow."

Management choices should be viewed as a gamble:
Catch quotas too big ==> less fish & $$ in future;
Catch quotas too small ==> less fish & $$ now.

- The continued existence of any fishery depends on having adequate survival of fish to reproduce and replace those that are harvested.
- If the sole objective of managing a fishery is to conserve the fish stock, then the safest action is to prevent humans from catching and killing any fish. However, ...
- Commercial fisheries exist because people are willing to pay fishers to catch fish. Fish are an excellent source of protein and people like to eat fish!
- Fishery management must balance conservation needs against the desire to make productive use of our fish resources.

Objectives of a Stock Assessment:

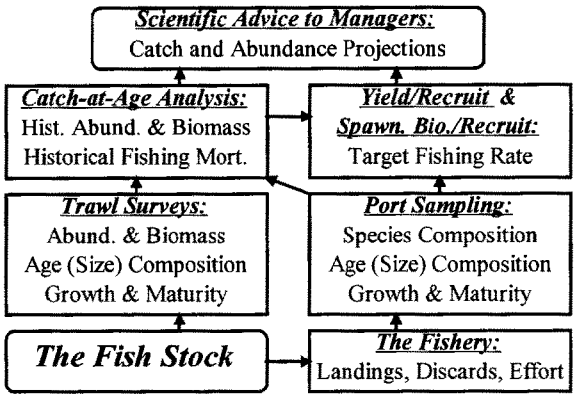
Estimate the current status of the stock. How many exploitable fish? How many new recruits?

Determine an appropriate target rate for fishing. What fraction of the stock can be harvested safely? Balance short-run catches against possible changes in the long-run biological productivity.

Analogous to a bank statement: stock size is the account balance; harvest rate is the interest rate.

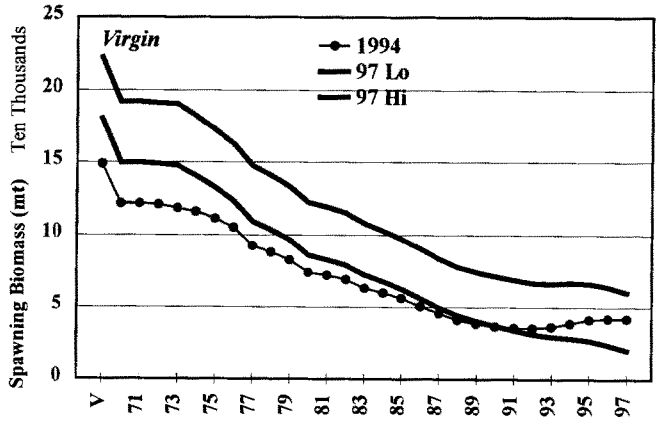
- Stock assessments provide fishery managers with basic information regarding the status of the fish stocks, whether they are increasing or decreasing and why.
- Many stocks are managed on the basis of annual harvest quotas. The quota for a stock is usually derived by multiplying the estimated current exploitable biomass times the estimated target exploitation rate.
- Projections of future harvests can be made if the strength incoming year-classes (the recruits) can be estimated or assumed.
- Fishery managers try to maintain the fish stocks, but they have very imperfect information regarding the sizes of the stocks and the rates at which they are increasing or decreasing.

The Groundfish Stock Assessment Process.



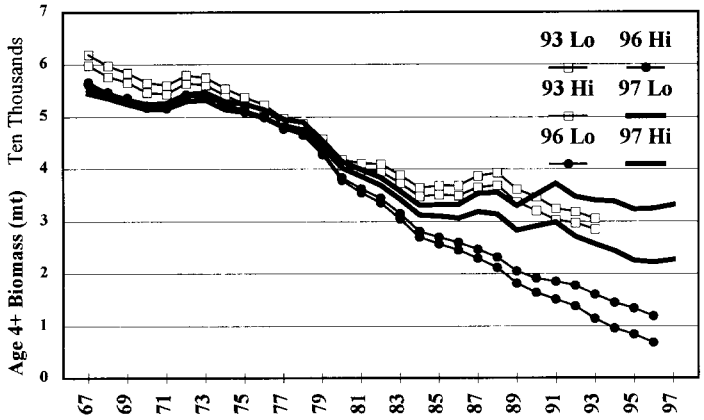
- Often there are two primary sources of data that are used in a stock assessment: one set of data comes from scientific trawl surveys of the stock; the other set comes from the fishing boats, either in the form of landing receipts and logbooks, or from scientific sampling of the landed catch.
- The catch-at-age analysis reconstructs the demographic history of the stock. It uses data from the trawl survey on stock biomass and age composition, and data from the fishers and the port sampling program on total landings and age composition. The catch-at-age analysis provides the estimate of current exploitable biomass that is used for setting the catch quota.
- The analyses of yield-per-recruit and/or spawning biomass-per-recruit use estimates of growth, mortality and maturity to determine the target rate of exploitation.

Sablefish Stock Assessments



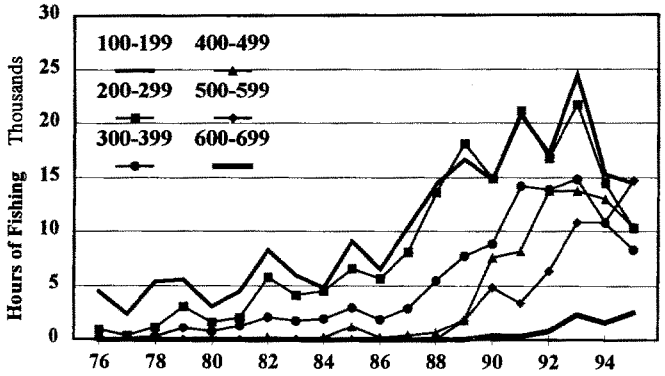
- The 1997 stock assessment for sablefish on the US west coast was dramatically different from the most recent previous assessment (1994) and recommended significant reductions in the annual catch quota.
- The 1994 assessment estimated that the spawning stock had declined to roughly 1/3 of its unexploited level, the target level that is presumed to sustain that maximum sustainable yield for this stock.
- The pessimistic scenario of the 1997 assessment put the spawning stock at only 11% of the unexploited level, well past the over-fished level; the optimistic scenario put it at 27% of the unexploited level.

Yellowtail Rockfish Assessments (N.Columbia)



- The 1996 stock assessment for yellowtail rockfish was dramatically different from the 1993 assessment and it indicated that significant reductions in the annual catch quota were needed.
- The assessment was redone in 1997 and the estimates of stock biomass (and the catch quotas) essentially returned to the levels estimated in the 1993 assessment.
- Because rockfish species tend to be very patchily distributed, the trawl survey estimates for rockfish off the west coast are highly imprecise, with large coefficients of variation (50% or larger).
- Furthermore, the surveys are only conducted every third summer.

Nominal Trawl Fishing Effort
(by Depth in Fathoms)



- Since 1976 there has been tremendous growth in the amount of groundfish trawling off the US west coast.
- In recent years the trawl fishers have increasingly operated in deeper water, in areas that previously received little fishing pressure.
- In my opinion, our current "groundfish crisis" has come about because of our inability to curb the growth of the fishing fleet.
- The Pacific Fishery Management Council is trying to manage the west coast groundfish stocks on the basis of highly uncertain information about the status of the stocks and without an adequate ability to control the capacity of the fishing fleet.

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Serving the shore based seafood processing industry in California, Oregon and Washington

April 27, 1998

STATEMENT OF ROD MOORE, EXECUTIVE DIRECTOR
BEFORE THE SUBCOMMITTEE ON FISHERIES
CONSERVATION, WILDLIFE & OCEANS
APRIL 30, 1998, WASHINGTON, D.C.

Mr. Chairman, Members of the Subcommittee, I want to thank you for taking the time to examine some of the problems affecting management of the Pacific groundfish fishery. Special thanks are due to Chairman Young and Ranking Member Miller for their particular interest in this topic.

For the record, my name is Rod Moore, I live in Portland, OR, and I am the Executive Director of the West Coast Seafood Processors Association (WCSPA). Our Association's members - who are all American-owned, on-shore processors - operate facilities in California, Oregon, and Washington which process the majority of Pacific groundfish, Dungeness crab, and pink shrimp landed in those States, along with salmon, swordfish, albacore tuna, and other species. Several of our members operate processing facilities or vessels in Alaska, and several are involved in transportation and distribution of seafood products. However, the processing of Pacific groundfish is the most significant part of their businesses.

You've heard people refer to the current situation with west coast groundfish as a "crisis." That term has been used before, especially in conjunction with northeast fisheries. In the 1980's, the New England fisheries suffered a collapse, brought on by years of disagreement between the seafood industry, the Council, and NMFS. While the conflicting parties argued, thirty years of scientific research were ignored. The result was not only biological problems for the fish, but social and economic problems for New England coastal communities as well.

What's the difference between them and us? We have quotas, we have catch reporting systems, we have management tools, and we have enforcement. What we *don't* have is the wealth of scientific data available to New England. In effect, twenty years of scientific neglect,

compounded by policy decisions based on the fear that the New England example could recur, have created the same social and economic problems on the west coast, *even though our fish stocks may be in good shape!*

Just look at the numbers. The value of the groundfish fishery in Oregon alone in 1997 was greater than the value of crab, shrimp, salmon, and all other finfish combined. It was nearly four times the amount appropriated in FY 98 for NMFS fishery management programs. Members of our Association employed more workers than the number of FTEs assigned to NMFS.

Now compare us to New England. The NMFS Northeast Fisheries Science Center has approximately 120 FTEs working on groundfish; there are only 28 FTEs dedicated to west coast groundfish in the Northwest, Southwest, and Alaska Fishery Science Centers combined. The Northeast Center is supported by two NOAA research vessels that conduct a complete resource survey every year. The west coast and Alaska share one aging research vessel which conducts a partial continental slope survey on the west coast every year, and a more complete continental shelf and Pacific whiting hydrographic survey *every three years*. At the end of my testimony, I have enclosed a chart showing the west coast continental slope survey coverage since 1984 and a comparison of the research days at sea in Alaska and on the west coast by the R/V MILLER FREEMAN. The point is not to complain about the relative coverage in the 2 areas, but rather to demonstrate the overwhelming stress that we are placing on a single aging vessel.

Even within our region, groundfish research is the poor stepchild. According to a recent analysis, during the last 10 years nearly **$3 billion** has been poured into Columbia River salmon recovery efforts, yielding *fewer* fish returning to the Columbia River than when the program started. As for groundfish, we maintained a thriving fishery on approximately 1% of that amount.

But these years of neglect have caught up with us. It is impossible to know how many fish are in the sea, but with enough data points and sophisticated analytical tools, you can make a good guess. We've got the tools, but the data isn't there.

Let me cite some examples from stock assessments done in 1997, which were used by the Council to set harvest guidelines. These are all biomass estimates, which vary depending on which data you use, which assumptions you make about the fishery, and in some cases, which computer model you use:

Shortspine thornyhead	low = 8,532 mt	high = 70,464 mt
Yellowtail rockfish	low = 27,784 mt	high = 85,263 mt
Sablefish	low = 48,542 mt	high = 126,523 mt
Widow rockfish	low = 45,220 mt	high = 65,120 mt

With ranges like these, how can anyone determine with precision or accuracy the amount of fish we should be catching? We don't know whether we are overfishing or leaving millions of pounds of fish in the ocean while we starve to death on shore.

Yet these are the sorts of numbers that the Council has to work with, and they do what they can to set harvest guidelines for the fishery. Unfortunately, here's where the next set of problems arise.

In 1996, the Congress amended the Magnuson Stevens Fishery Conservation and Management Act and imposed new standards and requirements on the Councils. We didn't all support all of these changes, but they are the law and we comply with it. Among other things, the Congress directed the Council to amend its fishery management plan to reflect the changes. The Council is attempting to do that, but as of yet there are no national standard guidelines published by the National Marine Fisheries Service on which to rely. Thus, not only is the Council making active management decisions based on virtually no data, it is also making those decisions based on no formal guidance.

So what happens? Again, a couple of examples. At the November, 1997, Council meeting, a motion was made to set an extremely low harvest level for sablefish. The motion lost on a tie vote. A second motion was made to set a higher harvest level based on analysis previously presented to the Council and the Groundfish Management Team. That motion lost by one vote. Finally, after a lengthy recess, the Council adopted a harvest level based on an analysis that had never been previously presented to the public. Aside from the lack of data, why all this confusion? In part because the policy that had quietly been announced by NMFS to the scientists and the Council was that "we are not going to have another New England happen here."

A second example: at the April, 1998, Council meeting, a NMFS scientist explained a new harvest policy that should be adopted because it was "risk averse." Under this policy, fishing could *never* take place at the MSY level, no matter how many fish are in the ocean and no matter that the law specifically provides that fishing up to the MSY level is allowed. When questioned about the origin of this proposal, the scientist replied that this had been adopted by a group of scientists under the direction of NMFS headquarters and this was the sort of policy that NMFS was going to look for when reviewing management proposals for approval.

Mr. Chairman, the last time I looked, the *Congress* writes the law, not an unidentified individual or group of individuals in the National Marine Fisheries Service. Yet because somebody in NMFS is paralyzed with fear that New England was not a unique occurrence, our fishery - and every other fishery in the United States - is being forced into a "one size fits all" mold that bears no relation to the realities of sustainable fisheries management.

How has our industry reacted, other than scrambling to stay alive? We have tried to be creative and innovative in solving the root problem: lack of data. For several years, the Oregon trawl industry, with support from the processing sector and fishermen from California and Washington, has carried out a pilot observer program to better calculate catches and discards. We convinced you in Congress to allow private vessels to be used for research, with partial payment made in fish, rather than money - a far less expensive proposition. We are in the process of refining that program with NMFS on the west coast.

My Association is working with a young NMFS employee on a Master's thesis project that will examine using processing plant workers to collect biological samples from fish being processed at the plant, thereby increasing overall sampling activity on the coast. We are supplying both funds and labor for the project. We are also exploring with NMFS a way to provide more useful fish ticket data to supplement the summary data that is now being used.

Gerald Gunnari was the first of several fishermen to provide expertise to NMFS on use of its research vessel and fishing gear. As a result of those efforts, the performance of the R/V MILLER FREEMAN has substantially improved.

We have been meeting regularly with NMFS scientists to design low-cost research projects that will increase our knowledge of groundfish. This year, NMFS will begin a port interview program designed by fishermen in Newport, which will provide "fishermen's

knowledge" of changes in catches and the ocean ecosystem, which can then trigger more refined scientific studies.

We have pushed for peer review of stock assessments and the use of a broad variety of data. The Council is now in the second year of a new stock assessment process that we hope will continue to improve the assessments. Recently, fishermen and processors have contributed their own funds to have an outside organization contract with an independent scientific group to perform stock assessments on two species. These assessments will provide an opportunity for a fresh look at the data available, and will be subject to the same peer review as those produced by NMFS. There are no preconditions set on the outside assessments, nor do we have any way of knowing what they will produce in terms of numbers; we simply believe it is time to get as many good scientists involved in the process as we can.

To address economic problems, the groundfish trawl industry, using new provisions in law added in 1996, is developing a groundfish permit buy-back program that will be funded entirely by the trawl fleet. While the program is still somewhat controversial in some areas, it is an honest attempt to use industry resources to respond to problems.

On a technical level, we have helped NOAA obtain funding for an electronic logbook program that will provide real-time data on fishing activity. This will supplement the existing extensive paper logbooks that fishermen already prepare.

One of the most innovative ideas that has been discussed involves turning wasted fish into funding for research. Under our management system, harvest guidelines for a fishery are set, based on the sort of data I described earlier. Using records of prior fleet performance, trip limits are then established for each species or species complex. The goal is to provide vessels with the opportunity to catch up to a certain amount of fish each month and to keep the fishery operating the entire year.

Unfortunately, with harvest guidelines - and thus trip limits - being set as low as they have been, fishermen often unavoidably take on board more of a species or species complex than they are allowed to land. This problem is exacerbated by the fact that there appear to be more of several species in the ocean than are reflected in the stock assessments. This is not bycatch in the sense of catching a species that is illegal to possess or that is the wrong species or size; this is fish which would be marketable if you hadn't already achieved your trip limit. Under the rules, however, fishermen have to dump these fish over the side.

For several years, many of us have decried the waste of this fish and sought some way to put it to use. Recently, following discussions with NOAA attorneys, we believe we have found a way to start a pilot project that would allow fishermen to land fish which otherwise would be wasted. Marketable fish in amounts greater than a trip limit - which we call "overages" - would be surrendered to an approved entity, such as the Pacific States Marine Fisheries Commission. The fish would be sold at market price to the local processor, and the proceeds would be used to help offset research costs. In time, as more research is done, the accuracy of stock assessments improve, and trip limits more precisely reflect the actual amount of fish available, overages would decrease. We believe that this will not only prevent the waste of useable protein and improve scientific knowledge, but will also comply with both the letter and the intent of the law's requirement to reduce bycatch.

There are technical problems that need to be resolved with this approach, but we believe we can surmount them. Unfortunately, it is not clear at this time whether NMFS is willing to look at this positive approach, rather than falling back on the bureaucratic mantra of "just say NO." Our industry is trying to be innovative in the face of adversity; we hope that NMFS will react accordingly.

One other concept that has been advanced particularly by the environmental community deserves some discussion. Suggestions have been made that a series of marine protected areas, or marine refugia, be established where no fishing will be allowed. The theory is that these areas will be nursery grounds that will allow fish stocks to replenish themselves.

To begin with, this is not an alien concept to the seafood community; we've had them for years, but we call them "closed areas." Fishermen and processors have advocated closures to protect spawning areas, to avoid gear conflicts, and to prevent incidental take of certain species.

Marine refugia are different in that they close areas to *all* fishing: sport and commercial, fixed gear and mobile gear, resident and migratory species. We are not opposed to the concept, but we believe that some practical standards should be used in establishing them and that there are problems which must be addressed before they are established.

For example, we suggest that marine refugia be established for an agreed purpose, that their size and location be based on sound scientific data, that they be the minimum size necessary to meet the purpose for establishment, and that a clear procedure be implemented to determine when they are no longer useful and should be re-opened to use.

There are already numerous areas off the west coast that are effectively closed to fishing due to lack of concentration of harvestable species, bottom topography, or the existence of sea-floor obstructions, such as communications cables. Some of these areas should be investigated first. Further, marine refugia may work reasonably well for fish such as certain species of rockfish, that spawn, live, and die in fairly localized areas, but not for species such as Dover sole, Pacific whiting, flatfish, sablefish, and more migratory rockfish commonly found in midwater.

Finally on this topic, the interplay of legal authority needs to be addressed. On the west coast, some fisheries are managed by the States, some by the Council, some by tribal authorities, and some by international treaty. An agreed mechanism needs to be found to involve all of these parties, as well as the sport and commercial fishermen who will be directly affected, in establishing, monitoring, and maintaining marine refugia on the west coast.

So given all of this, Mr. Chairman, why are we here and what do we want? I'll try to provide some suggestions.

RESEARCH

The obvious need is for money and bodies for the west coast fisheries science centers to conduct the research that is needed to provide more accurate stock assessments. While we are all trying to help, this need cannot be ignored. There are several places in the NMFS budget where modest amounts could be re-directed towards this effort. Not counting a little extra that was found last year, the FY 98 appropriations for groundfish equaled just less than $4 million, spread between three fishery science centers (Northwest, Southwest, and Alaska). Boosting that to $6 million total would go a long way towards solving our problems.

VESSELS

The R/V MILLER FREEMAN, which we share with Alaska, is not going to last much longer. In the meantime, even with increased funding, we are stuck with triennial resource surveys. One option, for the longer term, is to provide a new research vessel. While this has advantages, it is expensive. The reaction from the west coast industry has been mixed. A shorter term and less expensive option would be to use industry vessels for the bulk of survey work. This will be tried this fall. Unfortunately, the data produced will not be considered part of the survey time series, although that time series itself has numerous problems due to the scope of coverage

of past surveys, among other things. NMFS and the Congress need to make a choice, and they need to make it soon, on how to address this issue - new vessel or industry vessels. Either way, we have to get on with it so we don't let another year go by with nothing to show for it. We need annual surveys.

NMFS MANAGEMENT POLICIES

NMFS needs to be told to follow the law. National standard guidelines *based on reality* need to be issued. Policy decisions need to be taken out of the back room. We need to get away from this idea of punishing the seafood community because somebody is paranoid about what happened in New England ten years ago. Frankly, if NMFS continues on its present policy course, you can forget about funding the agency; none of us will be able to catch or process fish anyway, so save the taxpayers some money and we'll all go do something else. Congress passed the "Sustainable Fisheries Act" not the "Stop Fishing Act." Somebody needs to remind NMFS of the difference.

A SIMPLE, LOW-COST SOLUTION TO CAPACITY & ECONOMIC PROBLEMS

One of the difficulties fishermen have in leaving the fishery, even if they want to, is that many have invested over the years in the Capital Construction Fund (CCF) program. Under CCF, fishermen defer some of their profits by placing them in a fund which they later can use to build a new boat or rebuild their existing boat. However, if they want to leave the fishery, they have to pay a substantial penalty on the money in the fund, as well as paying taxes on CCF money at a high rate.

Congress has looked at changing or phasing out the CCF program many times. Perhaps you need to look once again. For example, you could expand the uses for CCF money; if an industry-funded buyback program is in place, let fishermen use their CCF accounts to pay the buyback assessments. Another alternative would be to allow fishermen to roll CCF accounts into an Individual Retirement Account or an education fund for their children. There would be little or no loss to the Treasury, because right now the money isn't being spent or taxed anyway; when it is taxed on retirement or when a child enters college, it would be roughly equivalent to taxes paid while constructing a new vessel - except we wouldn't be further stressing the fisheries.

JUMP-START THE BUREAUCRACY

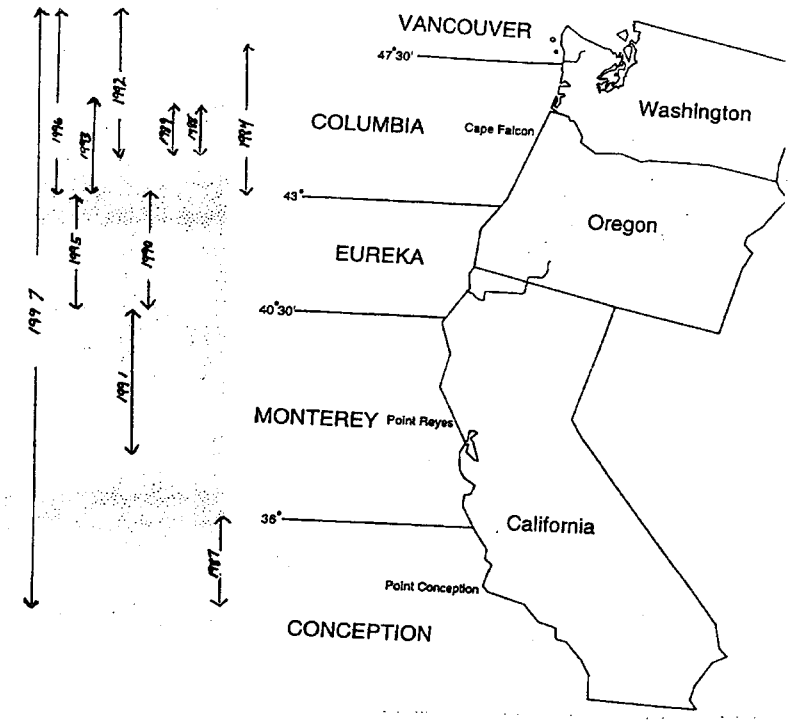
Bureaucracies, by nature, are not innovative - but fishermen and processors are. That's how we survive. We get tired of trying to work cooperatively and creatively, only to run afoul of the argument that "we don't do things that way." I've seen numerous occasions in the past when - if NMFS wants to do something - they'll find the authority in the law; but when they don't want to do something, they'll tell you the law doesn't allow it.

There are a lot of good, hard-working people in NMFS, and often they are so overwhelmed by the demands we put on them that they find it easier to say "no." There are also those who find it easier to deal with numbers than with real live fishermen and processors - sometimes I feel that way myself.

Nevertheless, there needs to be a new spirit and outlook in NMFS, one that seeks inspiration and creativity, one that stops treating the seafood community as the problem and starts treating us as partners in providing healthy, nutritious food for the world. That's not something you can legislate, but any encouragement would be welcome.

Mr. Chairman, as I said earlier, we don't have a crisis of no fish, we have a crisis of no science. Almost every fisherman and processor will tell you that what they see in the water and in the plants doesn't match what the computers say. Still, we need to be sure so that we don't overfish. I have tried to outline some of the things we are doing or that can be done. I'm not hear asking for major legislative relief or massive economic subsidies. We want to fix the problem and get on with our lives. You have already helped by holding this hearing today; we hope you will continue your interest in the future. Thank you.

AREA COVERAGE OF WEST COAST GROUNDFISH SLOPE SURVEY
1984 - 1987



R/V MILLER FREEMAN RESEARCH DAYS AT SEA			
	FY 1996	FY 1997	FY 1998
ALASKA	168	159	90
WEST COAST	28	42	88

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7 May 1998

Fisheries Conservation, Wildlife, & Oceans Subcommittee
Committee on Resources - U.S. House of Representative
805 O'Neill Building
Washington, DC 20515

RE: H.R. 3498 DUNGENESS CRAB CONSERVATION AND MANAGEMENT

Congressmen:

My name is Dale Beasley, I am a fourth generation fisherman, I have been a commercial fisherman off the Pacific Coast for over 30 years, and have fished dungeness crab since the early 1970's. As a representative of the old West Coast Troller's Association I testified before the House Merchant Marine committee in support of the original Magnuson Fisheries Conservation and Management Act of 1976.

Thank you very much for receiving testimony on HR3498, it is greatly appreciated by the West Coast dungeness crab fishery. This testimony is in addition to Mr. Thevik's testimony, which CRCFA fully supports.

Currently I am commissioner for the Columbia River Crab Fisherman's Association (CRCFA) and advocate issues for coastal fishermen from California to Canada. CRCFA hosts the annual towboat/crabber tow lane negotiations, produces and distributes tow charts to crabbers and towboaters from Cape Flattery to San Francisco. CRCFA represents all the WFOA (Western Fishboat Owner's Association) vessels on safety issues related to dredge mounding at the mouth of the Columbia River which separates Washington and Oregon. Through these contacts it is easy to get a firm understanding of coastal fleet needs and desires. CRCFA has worked hard to establish a solution to sustainable fisheries management for dungeness crab throughout its range. The overwhelming majority of the coastal crabbers understand the issue involved and desire to continue crab management by state authority.

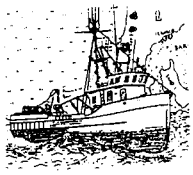
Interim authority for management of dungeness crab was included in the Magnuson-Stevens Fishery Conservation and Management Act on October 11, 1996 and expires October 1999. At Congressional direction, the Pacific Fisheries Management Council investigated the best alternatives to West Coast crab management. The process included public hearings. The primary tool was utilization of Pacific States Marine Fish Commission's Tri-State crab committee. Fishermen, processors, tribal representation, PFMC, PSMFC, State fisheries agencies from Washington, Oregon, and California, NMFS and others debated the issues and reached an industry and agency wide consensus. The best option for management of the dungeness crab fishery is to amend the interim crab authority to include all state laws on crab into the EEZ, except limited entry. The crab bill, HR 3948 as it is currently presented is supported by the overwhelming majority on the coasts of Washington, Oregon, and California.

HR 3948 will not add expense to the Federal budget. A highly sustainable fishery will continue to be well managed. It will allow the State of Washington to fairly address tribal allocations. Overcapitalization, safety, enforcement, and other pertinent issues can and will be met. Consistent regulation will apply in each region. The fishery needs some minor refinement and HR 3948 provides the tools necessary to achieve future goals.

Respectfully,

Dale Beasley

Dale Beasley, CRCFA



Summer Flounder: Comments & Questions on the Status of the Summer Flounder Resource

Submitted by Lund's Fisheries, Inc., Cape May, New Jersey

To

Congressman Saxton, Chairman
House Subcommittee on Fisheries Conservation, Wildlife and Oceans

April 30, 1998

Issue: Many commercial and recreational fishing constituents on the U.S. east coast perceive the NMFS stock assessment process, particularly for summer flounder, as a speculative one. There are strong beliefs, rightly or wrongly, that the assessment and resulting quota decisions are out of step with regard to stock fluctuations and assumptions pertaining to the age structure of a "recovered" population. Also, there are genuine concerns over fiscal impediments to biological data collection programs. As a last resort, several members of NMFS' constituency have turned to the courts and even the National Academy of Sciences, to repair what to them, appears to be broken. There are several issues involving the summer flounder stock assessment that are creating discontent throughout the coastal mid-Atlantic fishing communities. Here are just a few brief examples of some problem areas. These issues must be addressed openly and proactively if the existing impasse is to improve.

1) NMFS has reported in the most recent stock assessment that there are more flounder in the ocean today then at any time in previous history, yet the quotas are relatively small. How does NMFS justify this inconsistency?

2) How does NMFS intend to define when there are enough flounder to relax some of the regulations? In other words, how and at what point will NMFS decide when the east coast summer flounder stock is considered fully recovered?

3) Presently, NMFS has indicated that fishing must occur at a rate which will allow the flounder stock to achieve a specific age structure (i.e. a certain number of 1,2, 3, 4 year old fish and so on) before it can be considered recovered. What flounder-specific historical evidence exists that dictates which numbers constitute an appropriate conservation goal for the stock in 1998-99? Furthermore, there is evidence of a long term aging inconsistency in the summer flounder database. Has NMFS adequately addressed this problem?

4) Data programs designed to sample the harvest of commercial and recreational fishermen has been woefully inadequate in past years, particulary during 1993-1995 and especially for larger, older fish. This is further complicated by lucrative overseas sushi markets which require large fish. Fish harvested for these markets but not reported/sampled will distort our full understanding of stock structure. Is it conceivable this situation has impacted our picture of the stock's age structure and what can NMFS do to address this concern?

5) It is admittedly difficult to estimate discards in the commercial summer flounder trawl fishery. NMFS and the Mid-Atlantic Council are forced to utilize minimal data when making discard and subsequent quota assumptions. Complicating the issue are amendments to the summer flounder management plan changing mesh and fish minimum sizes, both of which directly impact future discard patterns. Without proper estimates from research or direct observation, assuming discard rates remains a serious issue. It would seem to me that a joint industry-NMFS research program utilizing the appropriate gear deployed in typical industry fashion during the season is the most dependable way to address this issue. Why haven't we conducted this type of work during the first 8 years of the management plan, and is NMFS considering any cooperative efforts with industry to address some of these assessment concerns? If so, what types of programs and in what time frame?

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