

**NOAA'S STELLER SEA LION SCIENCE  
AND FISHERY MANAGEMENT RE-  
STRICTIONS DOES THE SCIENCE  
SUPPORT THE DECISIONS?**

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**OVERSIGHT FIELD HEARING**

BEFORE THE

COMMITTEE ON NATURAL RESOURCES  
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

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Monday, October 17, 2011, in Seattle, Washington

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**OVERSIGHT FIELD HEARING TITLED “NOAA’S  
STELLER SEA LION SCIENCE AND FISHERY  
MANAGEMENT RESTRICTIONS — DOES THE  
SCIENCE SUPPORT THE DECISIONS?”**

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**Monday, October 17, 2011  
U.S. House of Representatives  
Committee on Natural Resources  
Seattle, Washington**

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The Committee met, pursuant to call, at 9:30 a.m., at the Ruth Fisher Boardroom of Union Station, 401 South Jackson Street, Seattle, Washington, Hon. Doc Hastings [Chairman of the Committee] presiding.

Present: Representatives Hastings and Young.

**STATEMENT OF THE HON. RICHARD “DOC” HASTINGS, A  
REPRESENTATIVE IN CONGRESS FROM THE STATE OF  
WASHINGTON**

Mr. HASTINGS. I want to thank everybody for being here today, and I note that we have a quorum under our rules.

The Committee on Natural Resources today is meeting to hear testimony on an oversight hearing on “NOAA’s Steller Sea Lion Science and Fishery Management Restrictions: Does the Science Support the Decisions?”

I ask unanimous consent that in addition to my oral statement that I will be giving that my colleague from Alaska, Congressman Don Young, be permitted to give an opening statement. Without objection, so ordered.

I will recognize myself now for an opening statement.

I would like to thank all of our witnesses that will be here today for their willingness to testify on the issue of Steller sea lions and whether fishery management measures that were in place to protect sea lions are based on sound science. These management actions are the latest in a series of restrictions placed on commercial fishing activities in the Bering Sea and the Gulf of Alaska in an effort to protect Steller sea lions.

The National Oceanic and Atmospheric Administration, or NOAA’s, own documents state that the imposition of the fishery management restrictions put in place last January will cost the commercial fishing industry between \$44 million and \$61 million per year, and cause a job loss of between 250 and 750 jobs.

Now, at a time when every effort should be focused on creating jobs and economic opportunities, it certainly stands out when an action by a Federal agency will result in this degree of economic loss, especially when one of the missions of the agency is to fully utilize our Nation’s fishery resources.

Now, having said that, I understand that NOAA has multiple missions. I also understand that there is a lot about Steller sea

lions that is still poorly understood. However, I am concerned that the decision to impose these restrictions was based on whether fishing was, and I quote, “not likely to jeopardize the continued existence of a listed species.”

Now, that standard seems to put the burden of proof on whether the Agency could disprove that the commercial fishing industry was responsible for harming Steller sea lions. The fact that the Biological Opinion uses the word “may” throughout the document indicates to me that the Agency is not sure what is going on in the Bering Sea and, therefore, cannot disprove any of its theories.

When an agency puts in place a restriction on an industry that will result in a loss of \$61 million per year, and a cost of up to 750 jobs, I expect them to be certain in their deliberations. The Biological Opinion leaves one to wonder whether there is any certainty.

The independent scientific review that was commissioned by the States of Washington and Alaska appear to share this concern. In fact, their report states, and I quote, “The conclusions of the BiOp regarding the finding of jeopardy and its posited cause (nutritional stress from food competition with fisheries) do not follow logically from scientific, economic, and social information presented in the BiOp and attendant documents.”

The report goes on to say, and I quote again, “The conclusions are contradicted by both information presented in the BiOp as well as information not presented in the BiOp.”

When 13 of the 14 criteria assessed by NOAA to determine if nutritional stress was restricting recovery for the western population came up negative, while at the same time the Biological Opinion concludes that the fishing industry is restricting food availability, it simply raises questions about the validity of the entire Biological Opinion.

This is just one question that has been raised regarding the science behind the fishing restrictions. When the agency’s own science conflicts with their conclusions, it is no wonder the States of Washington and Alaska commissioned an independent scientific review.

It is also concerning that so little has changed since 2000 when Congress began to appropriate funding for Steller sea lion research. Beginning in Fiscal Year 2001, Congress has appropriated more than \$150 million for Steller sea lion research, and more than half of that went directly to NOAA for their own research program. And 10 years later, we are still asking many of the same questions.

Despite this funding, NOAA still has not been able to answer the questions regarding whether the commercial fishing industry is limiting the food available for Steller sea lions. This is the first area of research that should have been conducted so that we would not be in the situation we are now, facing new restrictions that will cost jobs and restrict economic activity.

We now have a final report from the independent scientific review panel, and the report raises serious issues with the conclusions in the Biological Opinion, and also raises questions whether the science even supports the conclusions made by NOAA. The real question is what the Agency will do with this new information.

Now, I hope our witnesses, and particularly our NOAA witnesses, will discuss what happens next. NOAA has the authority,

and I would argue, the obligation, to take this independent review panel's report and to take another look at their findings in the Biological Opinion.

I would also strongly suggest that NOAA look at other new information, such as the Atka mackerel stock assessment that was completed after the BiOp was finalized. This new information is certainly relevant, and the Agency has an obligation to review all new information when it becomes available.

I understand NOAA has its own plans for its own independent review of the BiOp. I hope this independent review will allow for public input as the Washington State and Alaska review did. I would also encourage NOAA to develop the terms of reference for the review in a manner suggested by the North Pacific Fishery Management Council, and to include a review of the science and the conclusions contained in the BiOp.

[The prepared statement of Mr. Hastings follows:]

**Statement of The Honorable Doc Hastings, Chairman,  
Committee on Natural Resources**

I would like to thank our witnesses for their willingness to testify today on the issue of Steller sea lions and whether the fishery management measures that were put in place to protect sea lions are based on sound science. These management actions are the latest in a series of restrictions placed on commercial fishing activities in the Bering Sea and the Gulf of Alaska in an effort to protect Steller sea lions.

The National Oceanic and Atmospheric Administration's own documents state that the imposition of the fishery management restrictions put in place last January will cost the commercial fishing industry between \$44 million and \$61 million per year and cause the loss of between 250 and 750 jobs. At a time when every effort should be focused upon creating jobs and economic opportunities, it certainly stands out when an action by a Federal agency will result in this degree of economic loss—especially when one of the missions of the agency is to fully utilize the Nation's fishery resources.

Having said that, I understand that NOAA has multiple missions. I also understand that there is a lot about Steller sea lions that is still poorly understood. However, I am concerned that the decision to impose these restrictions was based on whether fishing was "*not likely to jeopardize the continued existence of a listed species...*" That standard seems to put the burden of proof on whether the agency could **disprove** that the commercial fishing industry was responsible for harming Steller sea lions. The fact that the Biological Opinion uses the word "may" throughout the document indicates to me that the agency is not sure what is going on in the Bering Sea and therefore cannot disprove any of the theories.

When an agency puts in place a restriction on an industry that will result in a loss of up to \$61 million per year and cost 750 jobs, I expect them to be certain. The Biological Opinion leaves one to wonder whether there is any certainty. The independent scientific review that was commissioned by the States of Washington and Alaska appears to share this concern. In fact, their report states, "the conclusions in the BiOp regarding the finding of jeopardy and its posited cause (nutritional stress from food competition with fisheries) do not follow logically from scientific, economic, and social information presented in the BiOp and attendant documents." The report goes on to say, "The conclusions are contradicted both by information presented in the BiOp as well as information not presented in the BiOp."

When 13 of the 14 criteria assessed by NOAA to determine if nutritional stress was restricting recovery for the western population came up negative while at the same time the Biological Opinion concludes that the fishing industry is restricting food availability, it raises questions about the validity of the entire Biological Opinion. This is just one question that has been raised regarding the science behind the fishing restrictions. When the agency's own science conflicts with their conclusions, it is no wonder the States of Washington and Alaska commissioned an independent scientific review.

It is also concerning that so little has changed since 2000 when Congress began to appropriate funding for Steller sea lion research. Beginning in Fiscal Year 2001, Congress appropriated more than \$150 million for Steller sea lion research and more than half of that went directly to NOAA for their research program. And ten

years later, we still are asking many of the same questions. Despite this funding, NOAA still is not able to answer the questions regarding whether the commercial fishing industry is limiting the food available for Steller sea lions. This is the first area of research that should have been conducted so that we would not be in the situation we are in now—facing new restrictions that will cost jobs and restrict economic activity.

We now have the final report from the independent scientific review panel and the report raises serious issues with the conclusions in the Biological Opinion and also questions whether the science even supports the conclusions made by NOAA.

The real question is what the agency will do with this new information. I hope our witnesses—in particular our NOAA witness—will discuss what happens next. NOAA has the authority, and I would argue the obligation, to take this independent review panel's report and to take another look at their findings in the Biological Opinion. I would also strongly suggest that NOAA look at other new information such as the Atka mackerel stock assessment that was completed after the Biological Opinion was finalized. This new information is certainly relevant and the agency has an obligation to review all new information when it becomes available.

I understand NOAA has plans for its own independent review of the Biological Opinion. I hope that independent review will allow for public input as the Washington state and Alaska review did. I would also strongly encourage NOAA to develop the terms of reference for the review in the manner suggested by the North Pacific Fishery Management Council and to include a review of the science and the conclusions contained in the Biological Opinion.

Mr. HASTINGS. And with that, I would like to recognize my colleague from Alaska, Mr. Young.

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

Mr. YOUNG. Thank you, Chairman Hastings, and thank you for holding this hearing on a topic that is of great interest to both of our States, and for hosting me in your great State of Washington—although I think where you are from is a lot nicer, but that is beside the point.

The other day, I was reminded about a hearing held on this same topic in 1999. At that hearing, my friend, former Chairman Jim Saxton, said, “If you can clearly identify a problem and a solution, then everyone will work together to accomplish the goal. If there is scientific uncertainty, distress, and animosity, then the process of cooperatively working together to find a solution is doomed to fail.”

Over a decade later, sadly nothing has changed, as you mentioned in your statement. We are talking about the same issue and asking the same questions. Most shocking, significant taxpayer dollars have been directed toward research on the Steller sea lion. The National Marine Fisheries Service, NMFS, still cannot answer basic questions, and is making decisions that impact the economies of an entire region and countless individual families with grossly limited data.

Once again, the Agency cannot say with certainty what is causing the population decline. But again, fishermen are paying the price. While we have no idea if these closures and restrictions will benefit the sea lion, we do know they will have devastating effects on fishermen and fishing communities.

From all the evidence I have seen, I can reasonably draw only one conclusion: We are confronted with an agency that has a premise, but a lack of information to prove or disprove it. And out of fear of a lawsuit by extreme organizations, the Agency hides



behind the “best available science” excuse. The worst thing, Mr. Chairman, their “best available science” did not use any science from the State of Washington or the State of Alaska. They used excuses and exercised an overabundance of precaution akin to someone who cannot swim refusing to bathe.

I want to commend the States of Alaska and Washington for taking it upon themselves to work together to find answers for these outstanding questions. Among other things, they found that the Biological Opinion’s conclusions were contrary to their own science, it was not adequately peer reviewed, and was not supported by scientific evidence.

As Alaska and Washington have aptly demonstrated, this NMFS proposal does not have the best available science, or even complete science, and as a result, our fishermen and communities will suffer.

Mr. Chairman, I do believe this is being driven within the Agency. I am trying to find who is pushing this issue, and I think there is a political agenda. It is not new. It has happened in the past, and it will probably happen in the future unless you and I and NMFS and NOAA work together with those involved to solve this problem.

There is no shortage of sea lions. I have always fought this issue to arbitrarily set the number of sea lions. It had no scientific information behind it, and what it should be. And even in their own report, they said there was no availability of science to say fishermen are causing the problem. And, in fact, the sea lion herds are stabilized. I even called the head of NOAA when this occurred and asked them are they the same, because the so-called Western stock has declined, but the Eastern stock has increased, and it has the same DNA. And yet, they are punishing my fishermen, your fishermen, and they are doing what I think gives NOAA a black eye.

NOAA is not really on my favorite list anyway, I want you to know that. Over the years I have introduced bills to eliminate NMFS because you do some real stupid things. And I just argue work together, let us do what is right, and do not caught get into this mid-management pushing of something that is an agenda. Get everybody off the water. No human fishermen will raise all our fish in fish farms off our shores. That is coming right out of your department. That is not right.

With that, I yield back.

[The prepared statement of Mr. Young follows:]

**Statement of The Honorable Don Young, the Representative in Congress  
from the State of Alaska**

Chairman Hastings, thank you for holding this hearing on a topic that is of great interest to both of our states, and for hosting me in your great state of Washington.

The other day, I was reminded about a hearing held on this same topic in 1999.

At that hearing, my friend, former Chairman Jim Saxton said,

“If you can clearly identify a problem and a solution, then everyone will work together to accomplish the goal. If there is scientific uncertainty, distrust and animosity, then the process of cooperatively working together to find a solution is doomed to fail.”

Over a decade later, sadly, nothing has changed and we’re talking about the same issue and asking the same questions. Most shocking, significant taxpayer dollars have been directed towards research on the Steller Sea Lion, yet the National Marine Fisheries Service (NMFS) still cannot answer basic questions, and is making decisions that impact the economies of an entire region and countless individual families with grossly limited data.

Once again, the Agency cannot say with any certainty what is causing the population decline, but fishermen and again paying the price. While we have no idea if these closures and restrictions will benefit the sea lion, we do know that they will have devastating affects on the fishermen and fishing communities.

From all the evidence I've seen, I can reasonably draw only one conclusion—we're confronted with an Agency that has a premise, but a lack of information to prove or disprove it. And out of fear of a lawsuit by extreme organizations the Agency hides behind "the best available science" excuse and exercises an overabundance of precaution akin to someone who can't swim refusing to bathe.

I want to commend the States of Alaska and Washington for taking it upon themselves to work together to find answers to these outstanding questions. Among other things, they found that the Biological Opinion's (BiOp) conclusions are contradictory to their own science, weren't adequately peer reviewed, and are not supported by scientific evidence.

As Alaska and Washington have aptly demonstrated, this NMFS doesn't have the best available science or even complete science, and, as a result, our fishermen and communities will suffer.

Once again, Chairman, thank you for holding this hearing and I, like you, look forward to examining this issue more closely today and hearing from our witnesses.

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Mr. HASTINGS. I thank the gentleman for his opening statement, and obviously in your remarks trying to ascertain what exactly is happening. That is the reason for this hearing. That is why we are holding this hearing here in Seattle—more closely to where all this activity happens. So, I thank you very much for being here and for your statement.

On our first panel, we have Mr. Eric Schwaab, Assistant Administrator for Fisheries, National Marine Fisheries Service, part of NOAA, Mr. Doug Vincent-Lang, Special Projects Coordinator of the Alaska Department of Fish and Game, and Mr. Bill Tweit, Special Assistant to the Washington Department of Fish and Wildlife.

Thank you all very much for being here. I will just remind you, if you have not had an opportunity to testify, your entire written statement will appear in the record. But we have these lights there sitting right in front of you and sitting right in front of me. It is a five-minute light, and when the green light goes on, that means you are doing really, really very, very well. But when the yellow light goes on, that means you have done four minutes, and you have one minute left. And when the red light goes on, then that means that your time has expired. Now, I want to accommodate you as much as we can, but because we have several panels, if you could confine your remarks to the five minutes, I would very much appreciate that.

So, we will start with Mr. Schwaab. Mr. Schwaab, you are recognized for five minutes.

**STATEMENT OF ERIC SCHWAAB, ASSISTANT ADMINISTRATOR  
FOR FISHERIES, NATIONAL MARINE FISHERIES SERVICE,  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION,  
U.S. DEPARTMENT OF COMMERCE**

Mr. SCHWAAB. Chairman Hastings, Congressman Young, thank you for the opportunity to testify today on NOAA's Steller sea lion science and fishery management decisions to protect the species. My name is Eric Schwaab. I am the Assistant Administrator for Fisheries within NOAA.

Also with me today is Dr. Doug DeMaster. Doug has been the Science and Research Director of the Alaska Fishery Science

Center since October 2001. They have directed most of the Steller sea lion research for the agency.

NOAA has been assessing Steller sea lion population status and the interactions between Alaskan groundfish fisheries and Steller sea lions for many years. Between the late 1970s and the late 1990s, the endangered Western population of the Steller sea lion declined by almost 90 percent throughout its range, reaching its smallest size in 2000.

In the late 1990s and early 2000s, NOAA and the North Pacific Fishery Management Council implemented a number of significant changes in fishery management that lessened the potential impact of the fisheries on sea lions. Most of these changes were made in the area to the east of 178 degrees west longitude. In those areas, we have seen significant improvement in the numbers of sea lions. However, there appears to be a significant problem west of 178.

This geographic boundary is significant because it is the same boundary where the National Marine Fisheries Service employed a different management strategy in 2001. The management strategies west of 178 degrees provided considerably more opportunity for commercial fishermen to prosecute fisheries inside of critical habitat.

More recently in November 2010, NMFS released the 2010 final groundfish Biological Opinion, and in December 2010 we published an interim final rule to implement Steller sea lion protection measures. Prior to finalizing the Biological Opinion, we provided draft to the public, comments were sought, and over 10,000 were received. All of these comments were evaluated and analyzed for possible inclusion.

In addition, an economic analysis was conducted to examine a wide range of potential impacts, including costs to the fishing industry and local communities.

In the Biological Opinion, NOAA determined that the continued operation of the fishery as it was currently being conducted was likely to jeopardize the continued existence of the Steller sea lions. Without protective measures, sea lions will likely continue to decline in abundance in the Western Aleutian Islands in the foreseeable future. Extirpation or localized extinction in the Western Aleutian Islands sub-region is likely, and possible in the Central Aleutian Island sub-region as well.

NMFS is committed to ensuring that all management decisions are based on the best available science. In the coming months, we will be taking a number of steps to address concerns being raised. On October 8th, 2011, the States of Alaska and Washington released a review of the Biological Opinion. We will review and consider the findings in the final report and any future consultations concerning impacts of Federally managed groundfish fisheries on Steller sea lions.

If new information on the impacts of the groundfish fisheries on Steller sea lions reveals effects on listed species or critical habitat that were not previously considered, then re-initiation of formal consultation is required and will be undertaken.

In addition, we will obtain a review of the Biological Opinion by the Center of Independent Experts. The CIE will be asked to examine information that was available at the time of the Biological

Opinion's development. The draft terms of reference for this review will be provided to the North Pacific Fishery Management Council for review and comment during the December 2011 Council meeting. The Council's comments will be considered by NMFS and the completion of the terms of reference for the review.

Furthermore, the Agency has proposed to the Council that the Steller sea lion Mitigation Committee be reconstituted, and asked to focus on management issues in the Aleutian Islands. The Agency will continue to work with the Council toward this goal.

Finally, the Agency will invite State of Alaska and Washington representatives to a meeting to discuss alternative approaches to resolving questions concerning the management of Steller sea lions under the Endangered Species Act and Marine Mammal Protection Act.

The ultimate goal of the actions taken by NMFS is the recovery of the Western Steller sea lion population so it can be removed from the list of endangered and threatened wildlife. These actions are designed to conserve Steller sea lion prey in important times and areas, while allowing as much fishing as possible to continue.

Thank you for the opportunity to discuss NOAA's Steller sea lion work. We are available to answer any questions that you may have at the appropriate time. Thank you again, Mr. Chairman.

[The prepared statement of Mr. Schwaab follows:]

**Statement of Eric Schwaab, Assistant Administrator for Fisheries, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce**

Chairman Hastings and members of the Committee, thank you for the opportunity to testify before you today on NOAA's Steller sea lion science and fishery management decisions to protect the species. My name is Eric Schwaab and I am the Assistant Administrator for Fisheries, within the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce. NOAA's National Marine Fisheries Service (NMFS) is dedicated to the stewardship of living marine resources through science-based conservation and management, and the promotion of healthy ecosystems. As a steward, NMFS conserves, protects, and manages living marine resources to ensure functioning marine ecosystems and recreational and economic opportunities for the American public.

On November 24, 2010, NMFS released the 2010 Final Groundfish Biological Opinion, which analyzed the effects of the groundfish fisheries in Alaska on the western population of the Steller sea lion. On December 13, 2010, NMFS published an interim final rule to implement Steller sea lion protection measures to insure that the Bering Sea and Aleutian Islands management area groundfish fisheries off Alaska are not likely to jeopardize the continued existence of the western distinct population segment of Steller sea lions or adversely modify its designated critical habitat (75 Fed. Reg. 77535). This rule went into effect on January 1, 2011. For purposes of consultation under the Endangered Species Act (ESA), NMFS was both the action agency as well as the consulting agency. The actions taken were designed to conserve Steller sea lion prey in important times and areas while allowing as much fishing to continue as possible.

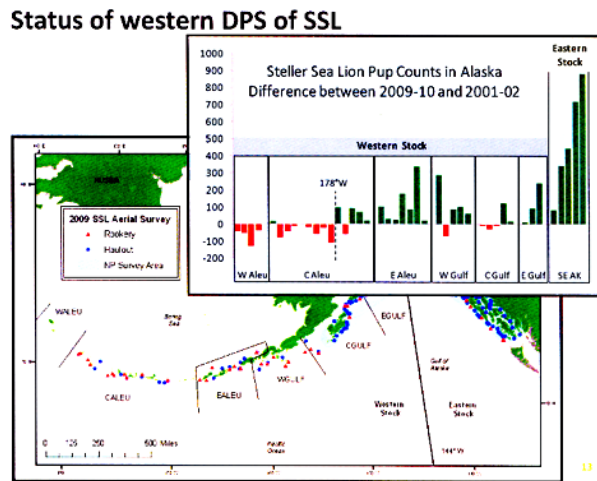
On October 6, 2011, the acting Secretary of Commerce received an invitation from the Natural Resources Committee of the House of Representatives to testify at a hearing to be held on October 17, 2011 in Seattle, WA concerning several aspects of management decisions regarding the federally managed groundfish fishery in Alaska and potential interactions with the endangered population of Steller sea lion. In particular, the concerns of the Committee are outlined in a series of questions that were posed by the Committee and are addressed herein.

**Background**

NOAA has been assessing the interactions between Alaskan groundfish fisheries and Steller sea lions for many years. The endangered western population of Steller sea lion has declined by almost 90% throughout its range, reaching its smallest size in 2000. In the late 1990's and early 2000's, NOAA and the North Pacific Fishery

Management Council implemented a number of significant changes towards fisheries management that lessened the potential impact of the fisheries on the sea lions. Most of these changes were made in the area to the east of 178° W longitude and in those areas we have seen significant improvement in the numbers of sea lions. However, as Figure 1 indicates, there appears to be a significant problem west of 178° W longitude.

**Figure 1.** Comparing the difference in pup production in 2001/02 and 2009/10 of Steller sea lions by longitude. Red indicates a decline in pup production, while green indicates an increase in pup production



This boundary at 178° W longitude is significant because this geographic boundary is the same boundary where NMFS changed its management strategy in 2001 by implementing the Steller sea lion protection measures analyzed in the 2001 Biological Opinion, such that the management strategies west of 178° W longitude provided considerably more opportunity for commercial fishermen to prosecute fisheries inside of critical habitat.

The best, peer-reviewed available science indicates that continued declines in sea lions in the western and central Aleutian Islands sub-region are due in part to reduced birth rates. One possible explanation for lowered birth rates in marine mammals is insufficient nutrition. Atka mackerel and Pacific cod are primary prey of Steller sea lions in the Aleutian Islands and they are targeted by the fisheries. Unless pup production in the western and central Aleutian Islands sub-regions is improved, the recovery of this ESA listed population will remain in doubt. As noted, historically, fishing was allowed in closer proximity to sea lion rookeries and haulouts in the western and central Aleutian Islands sub-regions than other parts of the western population's range. NMFS, therefore, took action to reduce fishing pressure in important times and areas for sea lions with the expectation that the biomass of Pacific cod and Atka mackerel will increase appreciably.

In its Biological Opinion, NOAA determined that the continued operation of the fishery as it was currently being conducted, particularly in the western Aleutians, was likely to jeopardize the continued existence of the Steller sea lions. NOAA then worked with the Council to craft a suite of measures to address the situation in a Reasonable and Prudent Alternative or RPA. The Biological Opinion required closing the western Aleutian Islands fishery management area (543) to fishing for Atka mackerel and Pacific cod, two Steller sea lion prey species. Protective measures in the Central Aleutian Islands (Area 542 and 541) include establishing a 3 nm no-fishing buffer around a newly-established rookery; new closures of important Steller sea lion critical habitat foraging zones to fishing for Atka mackerel and Pacific cod; reductions in Atka mackerel harvest amounts; and varying seasonal closures for various sectors targeting Pacific cod. The protective measures implemented as part of the interim final rule in 2010 are designed to increase the availability of forage fish (e.g., Atka mackerel and cod) in the region where sea lion abundance is currently in decline. NMFS took action because, without these protective measures, sea lions will likely continue to decline in abundance in the foreseeable future. Extir-

pation, or localized extinction, in the western Aleutian Islands sub-region is likely, and possible in the central Aleutian Islands sub-region.

#### **Development of the 2010 Final Groundfish Biological Opinion**

The fishery management decisions in the 2010 Final Groundfish Biological Opinion were developed through a collaborative process between the NMFS Alaska Region, Sustainable Fisheries Division and NMFS Alaska Region, Protected Resources Division. The Protected Resources Division identified the fishing activities that were likely to jeopardize the continued existence and recovery or adversely modify designated critical habitat for the western distinct population segment of Steller sea lion (hereafter referred to as the western population). The potential impacts of all Alaska groundfish fisheries on the western population of sea lions and their critical habitat were examined. NMFS determined through the analysis in the Biological Opinion that it could not ensure the groundfish fisheries in the Bering Sea and Aleutian Islands Management Area (primarily Atka mackerel and Pacific cod fisheries in the Aleutian Islands) were not likely to jeopardize the continued existence of the western population of sea lions or adversely modify its critical habitat. This determination required changes in these fisheries to ensure the effects of these fisheries were not likely to adversely impact the western population of Steller sea lion.

NMFS included an RPA for the management of the Atka mackerel and Pacific cod fisheries in the Biological Opinion. The Protected Resources Division identified in the Biological Opinion the protective measures that were needed to be met to remove the likelihood of jeopardizing the continued existence of the western population of sea lions and adversely modifying critical habitat in the development of the RPA. The Protected Resources Division then worked with the Sustainable Fisheries Division on the development of the RPA to ensure the fishery management decisions would meet the requirements of the ESA and that these measures could be developed and implemented in a timely manner for the start of the 2011 fishing year.

NMFS presented the draft RPA to the North Pacific Fishery Management Council (Council) in August 2010. Council and public comments were considered in development of the final RPA. In the final Biological Opinion, a result of the Council and public comment, revisions were made to the RPA as to further reduce the potential burden of the RPA on the fishing industry while maintaining the protection measures necessary to ensure no likelihood of the action jeopardizing the continued existence or adversely modifying critical habitat for the western population.

The RPA was structured to mitigate effects of the fishery in sub-regions where Steller sea lion abundance continues to decline (western and central Aleutian Islands sub-region) and where available information indicates that reproduction may be reduced to a level that cannot support positive population growth (the western Aleutian Islands sub-region). The western and central Aleutian Islands were the two sub-regions where population growth was negative from 2000–2008 and of most concern. NMFS determined that additional mitigation measures in the other three sub-regions in U.S. waters were unwarranted (i.e., western, central and eastern Gulf of Alaska). Currently, the western population of the Steller sea lion is growing at a rate of 1.4% per year. However, as explained in Chapter 7 of the Biological Opinion, the western population is not meeting the criteria of a recovering population as determined by the Revised Recovery Plan and is at risk of being extirpated in the western portion of its range in U.S. waters.

#### **Scientific Information for the Biological Opinion**

Information referred to in the Biological Opinion, on which the Agency made its determination regarding whether the action was likely to jeopardize the continued existence or adversely modify critical habitat of the western population, included: (1) counts of pups and non-pups by sub-region, (2) food habits data by sub-region, (3) telemetry data on foraging behavior, and (4) differences in fishery management strategies by sub-region. In addition, NMFS conducted research on the abundance of killer whales in the Aleutian Islands.

One of the most important pieces of information is shown in Fig 3.10 of the Biological Opinion (change in pup counts from 2005 to 2009 by degrees of longitude). Another very important piece of information is shown in Table 3.6 of the Biological Opinion (pup to non-pup ratios by sub-region). A summary of the underlying evidence supporting the RPA can be found on pages 359 and 360 of the Biological Opinion.<sup>1</sup>

These data suggested that some factor was acting west of 178° W longitude that was leading to the declines in pup production. Given the presumed linkage between

<sup>1</sup> NOAA would be happy to provide the referenced documents to Committee Members upon request.

Steller sea lion declines and nutritional stress, and the increased fishing effort in this region since 2001, it was reasonable to conclude that a restriction in fishing effort would remove fishery effects that may contribute to nutritional stress and potentially ameliorate the decline in pup production.

#### **Economic Analysis of the Biological Opinion**

The economic analysis examined a wide range of potential impacts, including 1) costs to the fishing industry directly affected and the communities deriving jobs and income from this fishing activity, and 2) benefits derived from recovering Steller sea lion populations.

The impacts on directly regulated Atka mackerel and Pacific cod fishing operations were evaluated by estimating the loss in gross revenue in Atka mackerel and Pacific cod production in prior years that would have occurred if the proposed measures had been in place. This information was supplemented by an analysis (based on past fishing patterns, and information on regulatory measures) of how the affected vessels might redeploy, what this might mean to their catches, and how this might affect other fishing fleets. Information from industry, primarily obtained during a special Council meeting in August 2010, and from comments on the draft Biological Opinion and draft environmental assessment/regulatory impact review, was used in this process.

Impacts on communities were evaluated in several ways. Licensing and permit records were used to identify homes and home ports for fishermen and vessels directly involved in the fishery. Case studies were performed on regional communities especially likely to be impacted by the action, including Adak, Atka, and Unalaska. More general discussions were provided for areas not local to the fisheries. A new impact model prepared by economists at the Alaska Fisheries Science Center was used to make quantitative estimates of job, and other impacts, associated with the fishery management decisions. Potential impacts on Community Development Quota groups were also discussed.

Potential benefits of the action were evaluated qualitatively for persons placing a value on Steller sea lion population health, and for persons using Steller sea lion populations for subsistence purposes.

While these findings were the primary focus of the analysis, the regulatory impact review also discussed impacts on other ecosystem resources, on consumers, on in-season management and enforcement, on safety, and on the collection of scientific information.

#### **North Pacific Fishery Management Council Involvement in the Development of the Biological Opinion**

Prior to finalizing the Biological Opinion, NMFS provided to the public a draft Biological Opinion with a draft RPA. The public review process involved a special meeting of the Council and its Scientific and Statistical Committee and Advisory Panel in August 2010. Public comments were sought, and over ten thousand were provided to NMFS. The Council submitted a recommendation for an alternative RPA that was initially crafted by its Advisory Panel. The Council's Scientific and Statistical Committee also reviewed the draft Biological Opinion and RPA, and drafted comments on the scientific analyses and the logic of the underpinning science supporting NMFS' recommended draft RPA. All comments and the Council's suggested alternative RPA were evaluated by NMFS and analyzed for possible inclusion in a revised RPA. NMFS ultimately accepted eight modifications to the RPA to the draft Biological Opinion. NMFS analyzed these modifications and found that there was a comparable conservation benefit in the revised RPA. For example, proposed restrictions were relaxed for vessels less than 60' in length using nontrawl gear, additional areas inside critical habitat in Area 542 was made available to nontrawl vessels, and small portions of critical habitat in the central Aleutian Islands were opened to trawling in a manner similar but not as extensive as the Council's motion. The revised draft RPA was presented to the Council and the public in October 2010, and then included in the final Biological Opinion.

#### **Independent Scientific Review of the Biological Opinion**

On October 8, 2011, the final version of the States of Alaska and Washington's review of the Biological Opinion (Bernard et al. 2011) was released. NMFS will review and consider the findings in the final report in any future consultations concerning impacts of federally managed groundfish fisheries on Steller sea lions. If new information on the impacts of the groundfish fisheries on Steller sea lions reveals effects on listed species or critical habitat that were not previously considered, then reinitiation of formal consultation is required (50 CFR sec. 402.16).

### **Future Review of the Biological Opinion**

NMFS will obtain a review of the Biological Opinion by the Center of Independent Experts. NMFS has a contract with the Center of Independent Experts to conduct independent reviews for the Agency of controversial or complex decision documents or assessments. The Center of Independent Experts will be asked to examine information that was available at the time of the Biological Opinion's development (through May 2010). The draft Terms of Reference for this review will be provided to the Council for review and comment during the December 2011 Council meeting. The Council's comments will be considered by NMFS in the completion of the Terms of Reference for the Center of Independent Experts review, which is scheduled for completion in 2012.

### **Plans for Gathering Additional Scientific Information about Steller Sea Lions**

NMFS will continue to conduct studies on Steller sea lions in Alaska, Washington, Oregon, and California, as well as in collaboration with other researchers in the U.S., Russia and Canada. These studies address critical data needs to support stock assessment and recovery efforts, test multiple hypotheses related to population decline, and inform management decisions and monitor protection measure effectiveness. Collectively this research encompasses population abundance and trend monitoring, estimation of survival and reproductive rates, determination of short and long-term movements within and between stock, state, and international boundaries, measures of foraging behavior, diet, and marine habitat requirements, and assessments of sea lion health and condition. The following types of research will be undertaken in FY12, assuming funding levels similar to those in FY11: (1) monitoring of population trends by sub-region for Steller sea lions in Alaska, (2) estimation of vital rates of Steller sea lions in Alaska and Russia, (3) research on the foraging ecology and composition of the diet in Alaska, and (4) surveys to determine the biomass of Atka mackerel and cod in the western, central, and eastern Aleutian Islands sub-regions.

### **Recovery Criteria in the Biological Opinion**

NMFS assembled a Steller Sea Lion Recovery Team (Team) in 2001 to assist in revising the Recovery Plan to promote the conservation of the Steller sea lion. The Team included: experts on marine mammals from the private sector, academia, and government; experts on endangered species conservation; and representatives of the commercial fishing industry, the Alaska Native Steller sea lion subsistence hunting community, and the environmental community. In March 2006, the Team submitted a draft of the Recovery Plan to NMFS, at which time it became an agency document. NMFS made minor editorial changes prior to releasing the first draft for public review and comment in May 2006. Upon review of the comments and recommendations submitted by peer reviewers and the public, and in light of new information available, NMFS further revised and updated the Plan. The changes made by NMFS were reflected in the Agency's updated (May 2007 version) Draft Revised Steller Sea Lion Recovery Plan, released by NMFS for further public review and comment on May 21, 2007 (72 Fed. Reg. 28473), with the comment period closing on August 20, 2007. NMFS reviewed the comments and recommendations submitted by peer reviewers and the public on the 2007 version of the draft revised plan and modified the plan as appropriate to produce the Final Revised Steller Sea Lion Recovery Plan in February 2008.

The Final Revised Steller Sea Lion Recovery Plan (2008) is a guidance document for the Agency as it continues to manage Steller sea lions and their habitat throughout their range. It contains recovery criteria which are described in several chapters of the Biological Opinion, and are stated as performance measures by sub-region (sub-regions from west to east are: Russia/Asia; western, central, and eastern Aleutian Islands; western, central, and eastern Gulf of Alaska). The Steller Sea Lion Recovery Team believed, and NMFS concurred, it was important to consider sub-population vital rates and demographic characteristics when considering the status of the western population of sea lions relative to recovery. The Recovery Plan notes that significant declines over large areas (two or more adjacent subareas) could indicate that extinction risk may still be high and that further research would be needed to understand the threats and would indicate a lack of recovery for the western population as a whole. Thus, NMFS believes it was important to maintain viable sub-populations within the western population and not rely solely on the core of the range to provide for increasing population numbers over the short term.

The 2008 Revised Recovery Plan for Steller sea lions provided NMFS' rationale for considering sub-population vital rates and demographic characteristics when considering whether the western population of Steller sea lion was sufficiently re-



covered to merit delisting. According to the Revised Recovery Plan, significant declines over large areas could indicate that the extinction risk for the western population may still be high and would indicate a lack of recovery. The Revised Recovery Plan stressed the importance of maintaining viable sub-populations throughout the range of the western population to achieve recovery and the ability to delist.

The current decline in abundance of Steller sea lions in the adjacent western and central Aleutian Islands sub-regions is, therefore, inconsistent with the recovery criteria of this population. Therefore, it was necessary to develop RPAs associated with the Biological Opinion for the Fishery Management Plans that could improve the availability of forage fish for sea lions in these sub-regions. Only then could NMFS ensure that authorization of the federal commercial fisheries was not likely to jeopardize the continued existence of the western population of sea lions or adversely modify its critical habitat.

The RPA recommended in the Biological Opinion was designed to insure that the action, the authorization of Federal fisheries off Alaska, was not likely to reduce appreciably the likelihood of recovery of the western population of the Steller sea lion. A key consideration in making the determination that the action, as modified by the RPA, would not reduce appreciably the likelihood of recovery was use of the criteria developed by NMFS and the recovery team to determine when recovery has been achieved and when the western population no longer requires protection under the ESA.

#### **Conclusion**

The ultimate goal of the actions taken by NMFS is the recovery of the western Steller sea lion population so it can be removed from the list of endangered and threatened wildlife. These actions are designed to conserve Steller sea lion prey in important times and areas while allowing as much fishing to continue as possible.

Thank you again for the opportunity to discuss NOAA's Steller sea lion science and fishery management decisions. We are available to answer any questions you may have.

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Mr. HASTINGS. Thank you very much, Mr. Schwaab.

And next, we will recognize Mr. Vincent-Lang, Special Projects Coordinator for the Alaska Fish and Game. You are recognized for five minutes. Thank you.

#### **STATEMENT OF DOUG VINCENT-LANG, SPECIAL PROJECTS COORDINATOR, ALASKA DEPARTMENT OF FISH AND GAME**

Mr. VINCENT-LANG. Good morning, Mr. Hastings, Mr. Young. Thank you for the opportunity to speak with you today.

I am going to speak with you regarding concerns the State of Alaska has with the National Marine Fisheries Service Biological Opinion for the Western stock of Steller sea lions.

In this Biological Opinion, the Service concluded that fishing in some areas of the Aleutian Islands jeopardizes the Steller sea lion stock and adversely modifies its critical habitat. Based on this finding, the Service adopted expansive new area closures and restrictions to fishing of a magnitude that cripples the fishing based economy of the Western Aleutians and raises environmental justice concerns.

As many as 900 people are employed by fishing fleets and processors in the area facing restrictions. The Service acknowledges that implementation of this decision would cause fishery losses of up to \$61 million annually and 750 jobs.

Alaska questions whether these restrictions are justified in light of evidence that the stock now numbers over 73,000 animals, is growing overall across its range, and that there is a lack of credible data showing that fishing is, in fact, jeopardizing Steller sea lions or adversely modifying their critical habitat.

The conclusion that fishing is affecting the Western stock is based on speculation, not hard facts. Let us look at the scientific data upon which the Service based its jeopardy and adverse modification finding.

First, the Western stock of Steller sea lions as a whole is recovering and is not in jeopardy at this time. The stock is growing at a rate of 1.4 percent per year, and now numbers over 73,000 animals.

Second, recovery objectives established by the 2008 Steller sea lion recovery plan are not being violated. Rather, the current status of the stock achieves the criteria established within the recovery plan.

Third, the primary rationale for the positive jeopardy and adverse modification finding is that Atka mackerel and Pacific cod fishing is causing nutritional stress to Steller sea lions. However, there is little sound scientific evidence that nutritional stress is in fact causing slower than desired rate of recovery in the Western Aleutians, and the scant available evidence is extremely weak.

Fourth, the cause for restrictions for Pacific cod as an important prey species for Steller sea lions in the Western Aleutians is tenuous at best, and the basis for its inclusion in the interim final rule is unjustified.

Fifth, while it may be theoretically possible for commercial fisheries to adversely affect the prey field of Steller sea lions, the data are very inconclusive. Studies founded by the Service itself, and largely ignored in the Biological Opinion, reveal that correlations between Steller sea lion population growth and fishing intensity over time and space indicate no significant relationship, much less a negative relationship.

Sixth, the biomass of both Pacific cod and Atka mackerel were increasing under the prior management regime, thus negating the need for drastic changes implemented by the Service. In fact, the most recent biomass surveys for these two species so increasing biomasses in the Western Aleutians, even to the level sought as targets in the final rule.

Finally, even accepting as true the false conclusion that fishing is negatively affecting Steller sea lions in the Western Aleutians, the Biological Opinion presented no information demonstrating that this effect is adversely modifying critical habitat as a whole for the Western stock as required under the Endangered Species Act.

In summary, there is simply insufficient scientific evidence to conclude that fishing is causing acute nutritional stress and, thus, jeopardy to the Western Steller sea lions and adverse modification of their critical habitat, much less to any level of effect that would require immediate implementation of correction actions at this time.

Alaska submitted extensive comments identifying these foundational science issues, as well as issues regarding the process used by the Service to reach its decision. We do not believe the Service adequately considered the State's concerns. Instead, they simply relied on their deference to justify their invalid conclusions and discount valid concerns raised by the State and others.

In reaching their conclusions, the Service failed to conduct an independent review of their work. In fact, the subsequent independent analysis conducted by the States of Alaska and Washington substantiated many of the scientific concerns identified by affected users.

We understand that the Service is planning to conduct a CIE review in the upcoming months. We strongly urge the Service to employ the Council-adopted terms of reference and established working groups to finalize the CIE process. Specifically, we request that the terms of reference mandate all of the science, including the report from aforementioned State review be examined. We also request that the BiOp findings regarding the effects of Steller sea lions be examined. Finally, we request that the public process be as transparent as that employed by the State panel.

Also, at the request of the Service, the North Pacific Fishery Management Council held a special meeting to review the Biological Opinion. The Service maintained that a special Council meeting was needed to accommodate its severely shortened decision time frame after working on the Biological Opinion for over four years. At this meeting, the Council developed a reasonable and prudent alternative that would have increased protection for Steller sea lions while minimizing the effects of fishing as required under the Magnuson-Stevens Act. We are disappointed the Service did not more fully incorporate the recommendations of the Council in the implemented action.

Finally, the State is concerned about the lack of meaningful public process allowed by the Service in evaluating the status of Steller sea lions. Specifically, we have concerns about the adequacy of the environmental assessment associated with the Biological Opinion. In particular, we question whether the economic valuations presented in the economic assessment reflect the real impacts to affected communities and fishing fleets. For example, the draft environment assessment released to the public was missing large pieces of critical information necessary to the public to make informed decisions.

This concludes my remarks. I would be happy to answer any questions. Thank you.

[The prepared statement of Mr. Vincent-Lang follows:]

**Statement of Doug Vincent-Lang, Special Assistant to the Commissioner,  
Alaska Department of Fish and Game**

Good Morning. Thank you for the opportunity to speak with you today.

My name is Doug Vincent-Lang. I am a Special Assistant to the Commissioner of the Alaska Department of Fish and Game (ADF&G). As part of my duties I am the Endangered Species Act (ESA) Coordinator for the State of Alaska. I have worked in this position since September, 2007. Previously I worked for the ADF&G as a biologist and Assistant Director for 26 years. I hold a B.S. degree in biology/population dynamics from the University of Wisconsin—Green Bay and a M.S. degree in Biological Oceanography from the University of Alaska Fairbanks.

Today I am here to speak with you regarding concerns the State of Alaska has with the National Marine Fishery Service's Biological Opinion for the western stock of Steller sea lions. In this Biological Opinion, the National Marine Fisheries Service (Service) concluded that fishing in some areas of the Aleutian Islands jeopardizes the Steller sea lion stock and adversely modifies its habitat. Based on this finding, the Service adopted expansive new area closures and restrictions to fishing of a magnitude that cripples the fishing-based economy of the western Aleutians and raises environmental justice questions. As many as 900 people are employed by fisheries fleets and processors in the area facing restrictions. The Service acknowledges

that implementation of its decision would cost fishery losses of up to \$66 million annually.

Alaska questions whether these restrictions are justified in light of evidence that the stock now numbers over 73,000 animals, that it is growing overall across its range, and that there is a lack of credible data showing that fishing is in fact jeopardizing Steller sea lions or adversely modifying their habitat.

The conclusion that fishing is affecting the western stock of Steller sea lions was based on speculation, not hard facts. Let's look at the scientific data upon which the National Marine Fisheries Service based their jeopardy and adverse modification:

1. The western stock of Steller sea lions as a whole is recovering and is not in jeopardy at this time. This stock is growing at a rate of 1.4% per year and now numbers over 73,000 animals. As noted in the Biological Opinion itself "Since 2000, the decline has ceased and in most sub-regions the WSSL population is increasing."
2. Recovery objectives established by the 2008 Steller Sea Lion Recovery Plan are not being violated; rather the current status of the stock achieves the criteria established by the Recovery Plan. To achieve recovery, the plan criteria dictate that the population trend in any two adjacent sub-regions cannot be significantly declining. In fact, the data show that no two adjacent sub-regions are significantly declining: one area does show a decline, but it is not possible to determine if this decline is significant. The plan also dictates that the population trend in any one sub-area cannot have declined by more than 50%. The data show that the population in one sub-region, the Western Aleutians, has declined, but at a rate less than 50%.
3. The primary rationale for the positive jeopardy and adverse modification finding is that the Atka mackerel and Pacific cod fisheries are causing "nutritional stress" to Steller sea lions. There is little sound evidence, however, that nutritional stress is causing the slower-than-desired rate of recovery in the western Aleutians, and the scant available evidence is extremely weak. For example, of the 17 possible life history indicators identified to assess nutritional stress for which the Service has data to evaluate, only 1 indicator showed a positive relationship: reduced birth rate. The remaining 16 biological indicators showed a negative relationship. These negative findings included emaciated pups, reduced pup body size, reduced pup weight, reduced growth rate, reduced pup survival, reduced juvenile survival, reduced adult survival, reduced overall survival, reduced pup counts, reduced non-pup counts, changes in blood chemistry, and increased incidence of disease. And even the reduced birth rate relationship should be viewed with caution given the lack of life history data for sea lions in the western Aleutians. Low birth rates could be attributed to factors other than nutritional stress, for example, predation. Other recent data, collected by the ADF&G and funded by cooperative research monies from the Service, confirms that first-year Steller sea lions pups in the western stock show no evidence of poor body condition. This is yet another source of data that calls into question the Service's unproven and untested nutritional stress theory, on which their onerous Reasonable and Prudent Alternative is based. In addition, other National Marine Fisheries Service funded research demonstrates out-migration of branded Steller sea lions that move between the western and eastern Steller sea lion stock boundaries, which calls into question the assertion in the Biological Opinion that there is no cross-migration between the two stocks.
4. The case for restrictions for Pacific cod as an important prey species for Steller sea lions in the western Aleutians is tenuous at best and the basis for its inclusion in the Reasonable and Prudent Alternatives and interim final rule is unjustified. Information available to assess sea lion diets in the western Aleutians is extremely limited. Only 46 total scat (feces) samples are available, and within that limited sample, 94% of the scat samples collected contained no cod at all. Information to assess the extent of sea lion feeding ranges is also extremely limited. The primary justification for the expansive closures in the western Aleutians is the foraging behavior of 3 juvenile males, which may not be representative of all Steller sea lions, particularly adult females, the population component most critical for determining population trends.
5. While it may be theoretically possible for commercial fisheries to adversely impact the prey field of Steller sea lions, the data are very inconclusive. Studies funded by the Service, but largely ignored in the Biological Opinion, reveal that correlations between Steller sea lion population growth and fishing intensity over time and space indicate no significant relationship, much less a negative relationship.

6. The biomass of both Pacific cod and Atka mackerel were increasing under the prior management regime, thus negating the need for the drastic changes implemented by the Service. As a result, the management measures imposed by the final Reasonable and Prudent Alternatives are not consistent with the most recent 2010 biomass estimates for either Pacific cod or Atka mackerel, which were not considered in the Biological Opinion and Reasonable and Prudent Alternative analysis even though they were available before the final Biological Opinion was signed. These most recent (November 2010) biomass surveys for these two species show increasing biomass in the western Aleutians, even to levels sought as targets in the Reasonable and Prudent Alternative.
7. Finally, even accepting as true the false conclusion that fishing is negatively affecting Steller sea lions in the western Aleutians, the Biological Opinion presented no information demonstrating that this effect is adversely modifying critical habitat as a whole for the western stock, as required under the Endangered Species Act.

In summary, there is simply insufficient scientific evidence to conclude that fishing is causing any nutritional stress and thus jeopardy to western Steller sea lions and adverse modification of their critical habitat, much less any level of effect that would require immediate implementation of corrective actions at this time. The State of Alaska submitted extensive comments identifying these foundational science issues, as well as regarding issues with the process used by the National Marine Fisheries Service to reach their decision. We do not believe that the Service adequately considered the State's concerns. Instead, they strongly relied on their deference to justify their conclusions and discount valid concerns raised by the State and others.

In reaching their conclusion, the Service failed to conduct an independent review of their work, as is normally undertaken and which we believe would have highlighted these shortcomings. In fact, a subsequent independent analysis contracted by the States of Alaska and Washington substantiated many of the scientific concerns identified by affected users.

Also, at the request of the National Marine Fisheries Service, the North Pacific Fishery Management Council held a special meeting to review the Biological Opinion and associated Reasonable and Prudent Alternative. The Service maintained that a special Council meeting was needed to accommodate a severely shortened decision timeframe—after working on the Biological Opinion for over four years. At this meeting the Council developed an alternate Reasonable and Prudent Alternative that would have increased protections for sea lions while minimizing effects on fishing communities as required by the Magnuson-Stevens Act. We are disappointed that the National Marine Fisheries Service did not more fully incorporate the recommendations of the Council in their implemented action.

Finally, the State is also concerned about the lack of meaningful public process allowed by the Service in evaluating the status of Steller sea lions. Specifically, we have concerns about the adequacy of the Environmental Assessment associated with the Biological Opinion; in particular, we question whether the economic valuations presented in the Economic Assessment reflect the real impacts to the affected communities and fishing fleets. For example, the draft Environmental Assessment released to the public was missing large pieces of critical information necessary for the public to make informed comments.

The state is challenging this Biological Opinion and the associated fishery restrictions on various scientific and procedural grounds. Nevertheless, we fully support the recovery of this stock and will work cooperatively with NMFS on joint research.

This concludes my remarks. I would be happy to answer any questions.

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Mr. HASTINGS. Thank you very much, Mr. Vincent-Lang. I appreciate your testimony.

And last, we will go to Mr. Bill Tweit, Special Assistant for the Washington Department of Fish and Wildlife. You are recognized for five minutes.

**STATEMENT OF BILL TWEIT, SPECIAL ASSISTANT,  
WASHINGTON DEPARTMENT OF FISH AND WILDLIFE**

Mr. HASTINGS. Press the button on your—

Mr. TWEIT. Thank you. Good morning, Chairman Hastings and Representative Young. Thank you for the opportunity to speak with you today.

I work for the Washington Department of Fish and Wildlife and represent Director Phil Anderson on the North Pacific Council.

In addition to Council representation, my duties at the Department include salmon harvest management, Columbia River water management, hydro powered mitigation, and tribal relations.

In my testimony this morning, I will describe the State of Washington concerns regarding the Biological Opinion on Steller sea lions, the operating guidelines developed by Washington and Alaska for the independent science review of this Biological Opinion and, third, our suggestions for resolution of the science and management conflicts that have been fostered by this Biological Opinion.

The State's fundamental concerns are described by Governor Gregoire in a pair of letters to Secretary of Commerce Locke. Copies of these letters are attached to my written testimony. The Governor expressed two fundamental and interrelated concerns: first, the high degree of scientific uncertainty that this Biological Opinion is addressing, and, second, the top down approach that NMFS has adopted to developing the Biological Opinion and its reasonable and prudent alternatives.

For contrast with the approach they have chosen here, I am very familiar with the process for crafting another notable Biological Opinion, this one regarding the impacts of the operation of the Federal Columbia River power system on listed salmonids.

While that process certainly has some considerable difficulties associated with it, the State of Washington strongly supports the current Federal approach. This approach has not ended all of the controversy or litigation surrounding this Biological Opinion, which is probably an impossible task anyway, but it has brought many of the parties together to focus on solutions and implementation of salmon recovery actions. It has become a regionally driven, bottom up process, in considerable contrast to the Steller sea lions BiOp, which has had virtually no constructive regional engagement and represents essentially an edict from the National Marine Fisheries Service.

Washington saw the need for an independent scientific review of this Biological Opinion due to the very significant scientific uncertainties. We took a great deal of care in developing the guidelines for the independent science review to ensure that the science advice we received would be unbiased and credible. Alaska shared our objectives.

We wish to avoid, on the one hand, an ill-informed review due to the reviewer's lack of familiarity with the subjects. At the same time, we also wish to avoid panelists that have already drawn their own conclusions about the Biological Opinion. Consequently, we in Alaska chose the two co-chairs for their extensive knowledge of their fields, their professional integrity and credibility, and their lack of engagement in this BiOp.

We gave them free reign to choose the remaining panelists, develop their terms of reference, and conduct their review. The panel conducted their work in an open and transparent process, holding

two public meetings to solicit input. Until we received their draft report, we had no advance knowledge of their findings or even whether they would be able to reach consensus on any or all of the issues they examined.

The fact that these four scientists were able to provide us with a consensus final report is very convincing to us. Their findings are Washington's position on the economic and scientific underpinnings of the Biological Opinion and its RPAs.

Based on their findings, it is apparent to us that the BiOp is flawed, likely as a consequence, in our judgment, of the top down Federal process that was employed.

In concluding, I would like to return to a primary theme of both of the letters from Governor Gregoire that NMFS commit to an open and transparent process to be implemented as quickly as possible for revisions to the Biological Opinion that are responsive to both the science panel findings and to regional comments. If NMFS chooses to initiate its own CIE review of the BiOp, their first step should be to develop the terms of reference concurrently with the Council. These terms should include the CIE's ability to examine the results of the State's independent review and should also include opportunity for public input.

I believe the North Pacific Council is willing to facilitate a process for engaging all stakeholders. In our view, that process should start now, and not wait for the results of another science review or for litigation to be settled. And most importantly, the top down approach with a one-sided and erroneous application of the precautionary approach is not acceptable.

Mr. Chair, the ingredients for a successful regional collaboration are present in this case. The North Pacific Council is a leader in applying ecosystem management principles to fishery management issues. The States of Washington and Alaska are experienced with and very supportive of collaborative approaches to solving thorny resource management issues, and the stakeholders are willing to participate. The only missing ingredient at this point appears to be a NOAA interest in collaborative development of measures that will support sea lion recovery.

We urge the Committee to express its support for NOAA to participate in a regional collaborative process to revise the Biological Opinion to address the errors and shortcomings identified by the State's independent science review.

Thank you. I would be pleased to answer any questions the Committee may have.

[The prepared statement of Mr. Tweit follows:]

**Statement of Bill Tweit, Special Assistant,  
Washington Department of Fish and Wildlife**

Good Morning. Thank you for the opportunity to speak with you today.

My name is Bill Tweit. I represent Director Phil Anderson on the North Pacific Fishery Management Council (NPFMC), and it is in that capacity that I provide our testimony to you today. I have worked for the Department since 1988; in addition to NPFMC representation my duties include salmon harvest management, Columbia River water management, hydropower mitigation, and tribal relations. I received my Bachelors degree in Ecology and Field Biology from The Evergreen State College in 1976.

In my testimony, I will describe the State of Washington concerns regarding the NMFS Biological Opinion that addresses potential impacts of the North Pacific

groundfish fisheries on Stellers Sea Lions (BiOp), the operating guidelines developed by Washington and Alaska for the Independent Science Review that we commissioned to review this BiOp, and our suggestions for resolution of the science and management conflicts fostered by this BiOp.

The State's concerns are described by Governor Gregoire in a pair of letters to Secretary of Commerce Locke; copies of those letters are attached to my written testimony. The Governor expressed two fundamental and inter-related concerns: the high degree of scientific uncertainty and the "top-down" approach that NMFS adopted to developing the BiOp and its Reasonable and Prudent Alternatives (RPA). She noted that NMFS was proposing regulations that would have significant impacts to the fishing fleets, and that there was considerable scientific uncertainty concerning the need for and the effect of those regulations.

In view of the significance of both the impacts and the level of scientific uncertainty, in October 2010 she urged NMFS to adopt the interim measures proposed by the NPFMC and to initiate a collaborative approach to development of the long-term measures. NMFS decided that the Council's proposed interim measures were inadequate, implemented their own recommended measures on January 1 via an interim final rule that allows enactment without public comment, and have yet to describe a collaborative approach for either resolution of the uncertainties or development of alternative measures.

In her January letter, following the NMFS interim final rule, Governor Gregoire reiterated her support for establishing a collaborative process, expressed her concern that the public process to-date had allowed little room for substantive public involvement, and emphasized her belief that controversial resource management issues with high levels of scientific uncertainty are best addressed through fair and transparent inclusion of all perspectives, and concluded that "there is great benefit in having all sides work together toward a solution".

I am very familiar with the process for crafting another NMFS Biological Opinion, regarding the impacts of the operation of the Federal Columbia River Hydropower System on listed salmonids. While that process has some difficulties, the State of Washington strongly supports the current Federal approach for development of the most recent version. The approach is inclusive of all regional governments, including plaintiffs, acknowledges the scientific uncertainties, and is oriented to solutions that are robust to the uncertainties and sensitive to economic impacts. An Adaptive Management process was developed to alter the Columbia River BiOp provisions if the assumptions proved incorrect.

This approach has not ended all of the controversy or litigation surrounding this BiOp, probably an impossible task, but it has brought many of the parties together to focus on solutions and implementation of salmon recovery actions. It became a regionally-driven, bottom-up process, in considerable contrast to the Stellers Sea Lion BiOp, which has had virtually no constructive regional engagement, and is essentially an edict from NMFS.

Washington acknowledged that there are very significant scientific uncertainties concerning factors for decline for Stellers Sea Lions in the central and western Aleutians, and was hesitant to draw our own conclusions regarding the NMFS scientific and economic assessments until we had the benefit of an independent review. Consequently, we took a great deal of care in developing the guidelines for the independent science review, to ensure that science advice would be unbiased and credible. Alaska shared our objectives. We wished to avoid an ill-informed review due to lack of familiarity with Stellers Sea Lion biology and population dynamics, fisheries population assessments, or North Pacific fisheries. We also wished to avoid panelists that had already made their own conclusions about the BiOp.

Consequently, we chose the two co-chairs for their extensive knowledge of their subjects, and their professional integrity and credibility. We gave them free reign to choose the remaining panelists, develop their terms of reference and conduct their review. Dr. David Bernard, a retired quantitative scientist, has a long and distinguished history in international arenas and knows population modeling and exploitation issues. Steve Jeffries, a researcher for WDFW, is a coast-wide authority on pinnipeds. They chose two additional panel members; Dr. Andrew Trites and Dr. Gunnar Knapp, finalized their terms of reference, and did their review without further policy direction from either state. The panel conducted their work in an open and transparent process, holding several public meetings to solicit public input. Until we reviewed their draft report, we had no advance knowledge of their findings, or even whether they would be able to reach consensus on any or all of the issues that they examined. The fact that these four scientists were able to provide us with a consensus final report is very convincing to us. Their findings are Washington's position on the economic and scientific underpinnings of the BiOp and its RPAs.



I understand that Dr. Knapp and Dr. Trites will provide the Committee with an overview of the panel's finding at this hearing, so I will focus on a few highlights from our perspective. The panel was critical of the science used in the NMFS finding of Jeopardy with Adverse Modification for the groundfish fisheries, for two reasons. They characterized the NMFS logic as a classic fallacy, confusing correlation with causation. The panel noted there was very scant scientific evidence supporting the fishery induced nutritional stress hypothesis, and that evidence is now over a decade old and not supported by more recent years' data, so it appears that NMFS applied the precautionary principle to fisheries simply because they believed that something had to be done.

As state managers, we value consistency in application of the ESA, and we appreciate that this extreme version of the precautionary approach has not been applied more broadly. The panel found that there is little overlap between sea lion prey and fishery catches; the fishery typically harvests larger fish than sea lions eat. NMFS acknowledges that reproduction of the primary prey species is not affected by fishing, and the science panel notes that the sea lions are eating younger fish than the fishery harvests. We conclude that the BiOp fishery restrictions are misdirected, will not benefit sea lions, but clearly are detrimental to the fishery.

This hearing comes shortly after the release of the science panel final report; I am sure that we will have more suggestions for BiOp revisions as we study their report. One conclusion that we draw from their report is that the BiOp is very flawed, and we believe that is likely a consequence of the "top-down" Federal process. In concluding, I'd like to return to a primary theme of both of the letters from Governor Gregoire: that NMFS commit to an open and transparent process, to be implemented as quickly as possible, for revisions to the BiOp that are responsive to the panel findings and regional comments. NMFS used an interim final rule process to implement this BiOp, and while we are still uncertain what that means, we hope that it provides more flexibility and timeliness for modification than a permanent final rule.

The North Pacific Council remains willing to facilitate a process for engaging all stakeholders in what Governor Gregoire terms a "regional collaborative process". In our view, that process should start now, and not wait for the results of a NMFS CIE review, or for litigation to be settled. NMFS needs to engage in this process with staff from their Sustainable Fisheries Division, not just the Protected Resources staff responsible for this flawed BiOp, and most importantly, NMFS should be told that their "top-down" approach, with a one-sided and erroneous application of the precautionary approach, is not acceptable.

The ingredients for a successful regional collaboration are present here. The North Pacific Council is a leader in applying ecosystem management principles to fishery management; the States of Washington and Alaska are experienced with and very supportive of collaborative approaches to thorny resource management issues; and the stakeholders are willing to engage when the science is solid. The long-list of sustainable fishing practices that North Pacific industry has supported includes development of seabird avoidance gear, protection of coral gardens, bottom trawl gear modifications, bycatch reduction programs, and support for scientifically established allowable catch levels. The only missing ingredient appears to be NOAA interest in collaborative development of measures that will support sea lion recovery.

We urge the committee to express its support for NOAA to immediately initiate a regional, collaborative process to revise the BiOp to address the errors and shortcomings identified by the state's independent science review.

Thank you, I would be pleased to answer any questions the Committee may have.

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Mr. HASTINGS. Thank you very much, Mr. Tweit, and thank all three of you for you testified here. As to your last comment, Mr. Tweit, that is why we are here.

Mr. Schwaab, according to Mr. Vincent-Lang's testimony that he alluded to orally, and in his written statement, he said that the November 2010 biomass survey show that the biomass for both cod and Atka mackerel are increasing, and in his written testimony he said, and I quote, "Even to the level sought as targets in the reasonable and prudent alternatives."

Now, is this not this significantly new information that should almost be a requirement for immediate review of the BiOp and the RPAs?

Mr. SCHWAAB. Thank you, Mr. Chairman. That type of information certainly could be grounds for re-initiation.

Mr. HASTINGS. Just grounds for?

Mr. SCHWAAB. Well, significant new information. Obviously, when we reach that critical point at which re-initiation would yield some significantly different result is something that we would be looking closely at.

Mr. HASTINGS. Well, we heard kind of specifically that the process by which, at least this decision or this observation from this group came about was very transparent.

Let me just ask a question then. I will use your terms "grounds," except that there is a process by which you go through. But will this information be discussed openly and transparently as you go forward?

Mr. SCHWAAB. Thank you, Mr. Chairman. Obviously as I indicated in my testimony, the new report initiated by—

Mr. HASTINGS. Do I take that as a yes then?

Mr. SCHWAAB. The answer is that that new report, along with a number of other new—

Mr. HASTINGS. My question was open and transparent. Do I take it as a yes that you will treat that openly and transparently?

Mr. SCHWAAB. Yes.

Mr. HASTINGS. Thank you.

Another question for you, Mr. Schwaab. Other than the funding that was appropriated by Congress for Steller sea lion research, and I alluded that \$150 million has been appropriated on that, what has been the Administration's request for this research?

Mr. SCHWAAB. This research, you know, generally falls into a range of other competing priorities that we put forward.

Mr. HASTINGS. Well, let me ask you. The reason I ask, if the economic impact is such that you stated in your report of up to 750 job loss and an impact of \$61 million, should the Administration not be requesting money for Steller sea lion research rather than saying, OK, it is part of the process if this is a big economic impact?

Mr. SCHWAAB. We do request money that is allocated to Steller sea lion research. I could, if you would like, perhaps defer to my colleague, Dr. DeMaster, to say in a little more detail what that ask is and to what purpose.

Mr. HASTINGS. Real quickly, go ahead.

Dr. DEMASTER. Thank you, Chair. Most of the funding requests are on the order of \$3 million to \$5 million a year for the National Marine Fisheries Service's work on Steller sea lions. Most of that work goes toward doing pup surveys to determine trends in pup counts, trends in non-pup counts in terms of abundance whether it is increasing or decreasing, food habits work, telemetry work to look at foraging. And our focus this year, in fact, right in the next two weeks—

Mr. HASTINGS. My question was not so much what you are doing because I assume that is all part of that. My question was, given the economic impact and the potential job loss by your own report,

should you not be requesting enough to get this done in a very timely manner? That is my question.

Dr. DEMASTER. In the end of last Fiscal Year and this Fiscal Year, Fiscal Year 2012, we specifically reprogrammed funding to do the telemetry work that the Council asked us to do regarding Steller sea lions in the Western Aleutians. We are doing that work jointly with ADF&G.

Mr. HASTINGS. OK. And finally, and you alluded to this, as you go through with this process, and both the witnesses on your panel suggested very strongly that their process was open and transparent. I will just ask again, because I think it is very important just that that process be as open and transparent.

Will you just give me your commitment that you will do that in a way that all people that have an interest in this will have adequate time in order to respond?

Mr. SCHWAAB. Thank you, Mr. Chairman. Can I just clarify? Are you speaking specifically to the CIE process or to the process in totality that we would introduce CIE information?

Mr. HASTINGS. Probably both.

Mr. SCHWAAB. So, the CIE process, as I mentioned, would involve a process whereby we would initiate with, as I indicated, work with the Council on establishing the terms of reference. That process then includes outreach to appropriate information that was available to the Agency at the time at which the BiOp was developed.

There is, of course, a broader process that involves significant opportunity for public engagement, consideration of RPAs and the like with the Council going forward.

Mr. HASTINGS. My time has run out, but that is the process that I want to make sure is more fully open and transparent.

Mr. SCHWAAB. Yes, sir, I can commit that to you.

Mr. HASTINGS. Thank you.

Mr. Young?

Mr. YOUNG. Thank you, Mr. Chairman.

We are going to have a series of questions because I know you have some more, I hope.

Mr. HASTINGS. Yes.

Mr. YOUNG. OK.

Mr. Schwaab, have you ever worked in Washington, D.C.? Do you work in Washington, D.C.?

Mr. SCHWAAB. My office has based in Silver Spring. I spend a lot of time in Washington, D.C., yes, sir.

Mr. YOUNG. That explains how you learned how to dance. You guys are really good at that. I say, I have watched the Administration come down time again, dance around an answer better than anybody I have ever seen. So, congratulations.

Is it true the Agency did a phone survey of the lower 48 States to ask people how much they would be willing to pay to recover the Steller sea lions? And how does that have any bearing whatsoever on anything relevant to the scientifically based Biological Opinion?

Mr. SCHWAAB. Mr. Young, I do not know the answer to that question. Perhaps Dr. DeMaster does.

Dr. DEMASTER. The answer is yes.

Mr. YOUNG. They do not even know what a Steller stock is, let alone Steller sea lion. If you took the money and the time in your

research, Doctor, to call people in the lower 48 and ask them whether they would be willing to save—did they ever write you a check? Did you ever ask for any money?

Dr. DEMASTER. No, we did not.

Mr. YOUNG. You did not. So, if I find a check written to you, how much they would be willing to pay, you would have to take that back, would you not? I would suggest you say yes, OK?

We have spent \$150 million in sea lion research since the Fiscal Year of, I believe it is 2001. And we still do not have any scientific information. When you have the term “best science available,” and you do not use the science of other peer review groups, is that best science available, Mr. Schwaab?

Mr. SCHWAAB. Mr. Young, if you are referring to the report that we just received, we have indicated that we will take that under consideration. If there is new evidence there that is useful, we will use that.

Mr. YOUNG. But I go to what science did you use? What was the science that you used to put this species and eliminate the fishing? What science was there? What did you do?

Mr. SCHWAAB. So, you know, perhaps I can mention a few items that we found particularly compelling—declining counts of pups and non-pups in the Western Aleutians and Central Aleutian Islands sub-region since 2000.

Mr. YOUNG. But, again, that, by the way, if I can say so has been refuted. There is an increase of population, not a decrease in population. The fact is there are probably more sea lions now in that area than there ever has been. Yet you are affecting about \$60 million in fisheries and affecting communities because you are sitting in Washington, D.C. or Silver Springs.

Now, are you going to listen to gentleman from Washington, the gentleman from Alaska? Are you going to review their findings?

Mr. SCHWAAB. Yes.

Mr. YOUNG. And what if you find that they are right.

Mr. SCHWAAB. If we find new information—

Mr. YOUNG. How long is that going to take?

Mr. SCHWAAB. Obviously there are a number of steps that are under way right now.

Mr. YOUNG. How long is it going to take?

Mr. SCHWAAB. I do not have an answer for you right now.

Mr. YOUNG. So, you mean you are going to shut the fisheries down. In fact, there is a paragraph here that really interests me, if I can find it, that if there a review of—and some things found that there could be a possible threat—I think it is in your testimony. It is on independent scientific review. That would be the States of Alaska and Washington, am I correct? Then I to go ahead and read it and it says, “NMFS will review and consider the findings of the final report of any future consultations concerning the impacts of Federally managed groundfish or fisheries of Steller sea lions. If any new information or impacts of the groundfish fisheries of the Steller sea lions reveals effects on the list of species or critical habitat that were not previously considered then, a formal consultation is required.”

So, if you review those, do you have another formal consultation, or are will you threaten them if they come in with their peer review?

Mr. SCHWAAB. There would be, at the point at which consultation was re-initiated, we would be entering into approximately an 18-month process. Obviously some of the information that was provided by the State's review might either be useful in that consultation or be grounds for initiation. There might be new scientific information based on some of the research that Dr. DeMaster mentioned that would be useful or cause re-initiation. There is new information relating to groundfish stocks that could also contribute to—of subsequent biological review.

Mr. YOUNG. Well, what I am looking at here, you say 18 months. We have communities that are directly affected, infrastructure will be directly affected. And you have done something from the top down with no consultation, no understanding, and no science. You have no science. That is why you lean on the term "best science available," I want to eliminate that, Mr. Chairman, take it away. The "best science available" to just say the "best science" so we can utilize that so you cannot arbitrarily go out and do things as you have been doing.

There is no shortage of sea lions, none. The pups are growing. We know that. We have evidence of that, about a 14 percent increase.

I am out of time, Mr. Chairman.

Mr. HASTINGS. I thank the gentleman. And I have—just have a couple of questions and let him proceed if he has more questions.

Mr. Schwaab, my understanding is you are required to make a decision by a petition from the State of Alaska, I think, to down list the Eastern population of the Steller sea lion by August of this year. It is obviously beyond August. When will you make that decision, and why did you not make the August deadline?

Mr. SCHWAAB. Thank you, Mr. Chairman. That process has been under way. We did have that August deadline. We are proceeding with preparation regarding that finding.

Mr. HASTINGS. Wait, wait, and wait, preparation for the finding. Now, it was August. When will you—maybe you are getting to the point, but when will you have that?

Mr. SCHWAAB. Yes, sir. The analysis has taken longer than anticipated. We are committed to completing that review and publishing our 12-month finding as soon as practicable. Other workload associated with Steller sea lion work falls on the same people who are following through on that review.

Mr. HASTINGS. So, when will it be done?

Mr. SCHWAAB. I cannot, as I sit here today, give you an exact date, sir.

Mr. HASTINGS. One month? One year?

Mr. SCHWAAB. I would certainly think it would be within a period of months.

Mr. HASTINGS. OK, that is plural. That is two months, less than six months?

Mr. SCHWAAB. More than one month, less than one year, sir.

Mr. HASTINGS. You know, if you sense that both of us are a little frustrated, you can understand why.

Mr. YOUNG. Incompetent.

Mr. HASTINGS. I mean, it was something that you had agreed to in August, and it has not happened. So, I ask you a straight-forward question, you give me your reasons why, but you give me essentially a one year time frame, and we are already two months beyond that time frame. And meanwhile, meanwhile, the activities here are potentially costing jobs in the fish industry by your own support.

I mean, so I just get pretty frustrated when I hear that. I do not know how much more to pursue it seeing that—do I have to get down on my hands and knees and plead? Do they have to get down on their hands and knees and plead and say, get this before a one year time frame? I mean, I just do not know how to respond to that sometimes.

This information that came to me, and I guess I will just to have to ask it straight forward. Is it true that some of the assumptions on the Steller sea lion feeding behavior was based on just three juvenile males?

Mr. SCHWAAB. Mr. Chairman, if you do not mind, could I defer to Dr. DeMaster?

Mr. HASTINGS. If he answers my question, yes.

Dr. DEMASTER. I believe the total number was more like 13.

Mr. YOUNG. Wow.

Mr. HASTINGS. Oh, 13. OK. So, it wasn't three. Now, if one were in statistics, you would say, well, it is four times the number, but it is still 13. And you are basing everything on 13 juvenile males in a population—what did I hear you say—of over 70,000?

Dr. DEMASTER. The population in the U.S. Western population is about 55,000, is our best estimate. But nonetheless, it is a large number. The decision was based on all of the available information, and part of that information was the telemetry data that was based on those 13 or so animals.

Mr. HASTINGS. Well, this goes to the frustrations, I think, that both of us share here about the scientific data. And I think it is something that both our other witnesses on the panel probably have a concern with. Thirteen, and I am sorry, I thought it was 70,000, but 13 out of 55,000 is still a pretty darn small number.

I recognize the gentleman from Alaska.

Mr. YOUNG. Thank you, Mr. Chairman.

You know, Mr. Tsukada notes that the Western DPS since 2000 has increased 14 percent, yet your opinion relies on a theory that birth rate is declining. That seems to be a major inconsistency. How can you explain that?

Mr. SCHWAAB. I believe that number is 1.4 percent.

Mr. YOUNG. No, it is 14 percent. It is 14 percent.

Mr. SCHWAAB. Oh, I am sorry.

Mr. YOUNG. That is right.

Mr. SCHWAAB. Over the decade. So, the focus obviously has been on the sub-regions, particularly the Western Aleutian sub-region, and that portion of the Central Aleutian sub-region that is west of that 178 degree west longitude line.

Mr. YOUNG. Well, those restrictions were put in in 2000, and the pups are increasing significantly, yet you shut that area down. What grounds? Where is the science behind that?

Mr. SCHWAAB. So, the focus, again, is on those westernmost sub-regions.

Mr. YOUNG. That is where you shut it down, and that is where the population increased.

Mr. SCHWAAB. I do not think that is accurate.

Mr. YOUNG. OK. It is accurate. I mean, I got some of the best staff in the world on this issue.

Mr. SCHWAAB. Could I allow Dr. DeMaster—

Mr. YOUNG. No. OK. I will leave Mr. Schwaab alone for a moment. I have had enough of him.

Dr. Vincent-Lang, State of Alaska, you noted that research conducted by the Alaska Department of Fish and Game confirms that the first Steller sea lion pups in the Western stock showed no evidence of poor body condition. Was this research considered when the Biological Opinion was drafted? And, if so, why did NOAA apparently disregard this information?

Mr. VINCENT-LANG. Thank you, Mr. Chair, Mr. Young, some of the critical pieces of information that we felt were available out in the science were not considered by NMFS in this Biological Opinion, including that. And, I guess, one of the things that we were most disturbed about was the really lack of consultation with the State of Alaska overall in the development of the Biological Opinion, or in the significant comments that the State provided and having a significant amount of interaction with how those comments might have been incorporated into the draft Biological Opinion that was released, and then the final that was put out upon which the RPAs were based.

Mr. YOUNG. OK. Is your department information best available, or is it good science?

Mr. VINCENT-LANG. Well, I think it is both.

Mr. YOUNG. You get rid of that word “available.” Best science.

Mr. VINCENT-LANG. It is best science.

Mr. YOUNG. OK, that is good.

Another one you say, marine mammal research has argued that fisheries are causing localized depletion or nutritional stress since the 1990s. Is this inherent bias by those who write the Biological Opinion, that it is not supported by available data? By the way, who wrote that opinion? Mr. Schwaab, who wrote the opinion?

Mr. SCHWAAB. The Biological Opinion came out of our Protective Resources Division—

Mr. YOUNG. Who did you hire to write it?

Mr. SCHWAAB. I cannot answer that question, sir.

Mr. YOUNG. Well, we probably can. It was the person who wrote the 2000 opinion, I believe. Is that correct? One of the people. Yet you went out and hired an outsider outside your department. The same person wrote it in 2000. Is that correct?

Mr. SCHWAAB. Mr. Chairman—Mr. Young, if I could obtain—

Mr. YOUNG. You can call me Chairman. It makes him mad; it does not make me mad.

Mr. SCHWAAB. I could find out for you—

Mr. YOUNG. I would appreciate that if you would.

Mr. SCHWAAB.—on who provided the writings for it, but I do not know that answer directly.

Mr. YOUNG. Who wrote it, if it was an outsider, a consultant paid by taxpayers' dollars, and you had somebody write an opinion that wrote it in 2000. I want all that information for the Committee. Thank you.

I go back to the amount of fisheries. Have there been any studies about how much—I believe you can answer this, Mr. Lang. How much fish were—cod was apparently being consumed by sea lions? What is the percentage? Do you have any idea? Is that their major sources of food?

Mr. VINCENT-LANG. I am not sure what you are asking, Mr. Young.

Mr. YOUNG. Well, I would say, what do sea lions eat?

Mr. VINCENT-LANG. Well, they are fairly opportunistic feeders, and I think they will feed on almost any kind of fish that are out there that is available to them.

Mr. YOUNG. OK. And the study—

Mr. VINCENT-LANG. I guess in our opinion that the amount of biomass that is out in the Western Aleutians, there is no evidence whatsoever that biomass is insufficient or is causing, in this case, nutritional stress to Steller sea lion.

Mr. YOUNG. In fact, there is larger biomass than expected, is that correct?

Mr. VINCENT-LANG. The recent biomass estimates that were put out after the BiOp release indicating that the target levels for the reasonable and prudent alternatives have been met. So, in fact, the biomass probably should be sufficient even if there was nutritional stress to alleviate that.

Mr. YOUNG. And it is increasing in numbers as far as the biomass?

Mr. VINCENT-LANG. The Western DPS is definitely increasing in number.

Mr. YOUNG. But that is the area that NOAA and NMFS shut down, is that correct?

Mr. VINCENT-LANG. They shut down an area west of 178.

Mr. YOUNG. OK. Mr. Chairman, again, my frustration goes beyond this. I have been in this business 40 years, and I have negotiated with NMFS and NOAA and they seem to ignore the paying customers, the States, and you do that. And those directly involved, the shareholders, for a sea lion. I am not talking about sea lions at the locks. I am talking about—they are all related, you know. It is my aunt or uncle, but they are all related, and there is no shortage of sea lions.

Thank you, Mr. Chairman.

Mr. HASTINGS. Thank you, Mr. Young.

I just have one further question because it came up earlier, again, Mr. Schwaab. You asked about the CIE review, and my question to you is, why, as I understand it, the CIE information is available for only information that is available through May 2010? Why is that cutoff date there?

Mr. SCHWAAB. The review would be focused on the information that was available at the time that the BiOp was undertaken.

Mr. HASTINGS. Right. OK. Now, you have new information. Are you going to open up that CIE review to the new information, for



example, or is just going to make a report based on the old information?

Mr. SCHWAAB. The new information would be a basis for re-initiation, not evaluation of the BiOp that is currently in place.

Mr. HASTINGS. Well, are you bound and rigidly saying that you can only look at something prior to, and not look ahead in that review process?

Mr. SCHWAAB. Mr. Chairman, I would just say there are two separate processes. One is a review of the Biological Opinion that is governed under which actions to date have been developed. The second would be a re-initiation which would take into account any number of pieces of new information.

Mr. HASTINGS. And that will happen?

Mr. SCHWAAB. That will happen if, based on any of either the information that is presented by the State's review, some new scientific information, some new fishery information, or any range of other pieces of information might suggest the need to do that.

Mr. HASTINGS. One last question. Will the CIE be open to public input?

Mr. SCHWAAB. That would be something that we could consider in the terms of reference, sir, that—

Mr. HASTINGS. Would you consider that?

Mr. SCHWAAB.—that such a provision should be.

Mr. HASTINGS. Would you consider that?

Mr. SCHWAAB. Yes. Yes.

Mr. YOUNG. Mr. Chairman?

Mr. HASTINGS. Go ahead. I yield to the gentleman from Alaska.

Mr. YOUNG. I go back to Mr. Lang. In scat examples taken, I believe, by the State, 94 percent of the scat from sea lions shows no cod evidence. What do you have to say about that Mr. Doctor? Mr. Schwaab?

Mr. SCHWAAB. Could I defer to Dr. DeMaster for that?

Mr. YOUNG. Yeah.

Mr. SCHWAAB. Thank you.

Dr. DEMASTER. I think that number is correct. It is six percent of the scats in the summer in the Aleutians contained cod. Ninety-four percent did not. In the winter, 26 percent of the scats contained cod, and the rest did not. So, there is a summer and winter contrast that is reflected in the Biological Opinion.

Mr. YOUNG. It is in the Biological Opinion?

Dr. DEMASTER. Yes.

Mr. YOUNG. I thought you ignored that. I go back to the other one, Mr. Schwaab. NOAA did hire somebody outside the Agency to write the BiOp. I wonder, again, I said, that was the same person that was involved in drafting the 2000 BiOp. Had a lot of irregularities. In fact, it was looked upon as a bad piece of work. How much did NOAA spend in hiring that person? This is the question I am going to ask you, and I want it in writing. How long was the employee of NOAA, and where was he working before NOAA brought him back? I just want to know his background when it comes to who wrote this thing and why you guys did not do it on your own, because you are supposed to be the one doing that work, not somebody you hire outside who has another special interest.

Thank you, Mr. Chairman.

Mr. HASTINGS. Thank you very much.

And I want to thank all of you on the panel. Mr. Schwaab, it might appear you are treated like a piñata here, but sometimes that goes with the territory. But I think that you can understand why sometimes we come to this view.

Now, maybe you are being told that this is what you have to say and to follow the company line, and I suppose that is all part of it. But I would just get back to what I mentioned in my opening statement referencing your BiOp is a potential job loss and the costs to the industry, and yet all we are trying to ascertain here or get to a point where there is a give and take in understanding why all of this is happening.

And the frustration would be—I am not going to ask you to respond to this, but I think anybody that is observing this, when we see the wide range of time lines on very specific questions, that leads one to become a piñata. And so, I will just say that very respectfully.

And before I dismiss this panel, I do want to say that if there are further questions that the two of us or others on the Committee would like to ask of you, we will send them to you written later, and if you would respond in a very timely manner, I would appreciate it very much.

I want to thank all of you for coming, and I will dismiss the first panel. At the same time, we will call up the second panel.

The second panel is Mr. Andrew Trites, Professor and Director of Marine Mammal Research at the University of British Columbia, Dr. Gunnar Knapp, Professor of Economics at the University of Alaska, Dr. Tim Ragen, from the U.S. Marine Mammal Commission, and Mr. Larry Cotter, Chair of the North Pacific Fishery Management Council. I invite you all to come up.

Thank you all very much for being here. You observed the first panel, but I will go through the rules one more time. The timing lights are in front of you, and when the green light is on, it means you have—you are doing very well. When the yellow lights comes on, it means you have one minute, and when the red light comes in, it means your five minutes is up. And as I mentioned earlier, your entire statement that you submitted for the record will be part of the record.

So, Dr. Trites, we will start with you.

**STATEMENT OF ANDREW TRITES, PROFESSOR AND DIRECTOR, MARINE MAMMAL RESEARCH UNIT, UNIVERSITY OF BRITISH COLUMBIA**

Dr. TRITES. Good morning. My name is Andrew Trites. I am a Professor at the University of British Columbia's Fishery Center, and Director of the Marine Mammal Research Unit. I am also the Research Director of the North Pacific University's Marine Mammal Research Consortium. I have conducted research on marine mammals for the past 31 years, and I focus most of my research and understanding on the decline of Steller sea lions and other fur seals in Alaska.

I am one of four scientists who recently completed an independent scientific review of the Biological Opinion that NMFS finalized in November 2010. One of our first tasks as a review panel

was to read all 664 pages of the BiOp. Now, this is something that not many people can say they have done, although everyone seems to have an opinion about the BiOp. There are not many people who can actually said that they have read it.

The BiOp is a long document with a plot and a cast of characters that is at time difficult to follow. In fact, reading the BiOp is much like trying to read John Milton's *Paradise Lost*, or Tolstoy's *War and Peace*. It requires dutiful reading and a keen awareness of the fact to distinguish between those facts that are correctly reported and those that are misused, mistaken, or missing all together.

Three of our panel members read the BiOp for the first time this summer. This included Dr. Gunnar Knapp, Dr. David Bernard, and Mr. Steven Jeffries. As for myself, I spent a good part of my summer reading it for a third time.

As a panel, we were asked by the States of Alaska and Washington to determine whether the National Marine Fisheries Service used all of the relevant scientific information, and whether they were impartial in how they considered the facts in the final Biological Opinion.

We tabled our final report this past week, which is available on the Alaska Department of Fish and Game's website.

Our report draws four conclusions about the science and the way in which NMFS chose to use it.

First, we found that the theory put forward by NMFS that Steller sea lions are nutritionally stressed from competition with fisheries is not well supported in the BiOp.

Second, we found that NMFS did not adequately examine and consider the alternative scientific explanations to explain the current decline, namely that killer whales are eating disproportionately greater numbers of sea lions, and that birth rates are lower because sea lions are eating too much groundfish.

Third, based on this and the evidence presented in the BiOp, we concluded that the finding by NMFS of jeopardy and adverse modification were not warranted.

And, finally, we concluded that the reasonable and prudent alternatives that NMFS put forward in the Biological Opinion are likely to contribute to sea lion recovery.

This last conclusion is perhaps the most regrettable conclusion of all. To think that the significant fishery closures and restrictions that went into effect on January 1st of this year in the Western Aleutian Island are unlikely to do any good, and could possibly even cause greater harm to sea lions.

In addition to reviewing the BiOp, we conducted a meta-analysis of the eight studies cited in the BiOp, plus two additional studies that looked for a statistical relationship between fisheries and sea lion numbers. Two things stood out from this analysis. First, there were a few weak statistical associations between fisheries and sea lion numbers prior to 2000; however, none of the studies found statistically significant associations consistent with the fisheries causing harm to sea lions after 2000. That is 100 percent of the statistical tests were consistent with the groundfish fisheries not having an effect on sea lion numbers in the last 10 to 20 years.

Second, the available data indicate that current harvest rate of Atka mackerel have been too low, and that the removals of Pacific

cod have been too small for the fishery on either species to cause nutritional stress to sea lions.

The BiOp never presented any direct evidence that sea lions are not finding enough groundfish to eat; thus, implementing an RPA that might increase prey abundance seems to be less about correcting a real problem and more about repeating something that NMFS did in the past in the Gulf of Alaska in the 1990s where sea lion numbers rose after RPAs were implemented.

Unfortunately, the BiOp provides no evidence that this increase in sea lions in the Gulf of Alaska was anything more than coincidental with management actions. In fact, the BiOp presents a multi-species model that indicates that this increase in sea lion numbers was just a coincidence in the last decade, and was not due to fishery restrictions.

So, the belief that RPAs will work in the Aleutian Islands was not based on science, and is simply a case of confusing cause with coincidence.

I would like to conclude by noting that as a review panel, we appreciate that many people may have difficulty believing that the BiOp could have gotten things so wrong, or that the BiOp did not properly consider the two leading alternative hypotheses. We, therefore, encourage others to read the 664 pages of the BiOp as we have done, as well as our review, which is available online, to judge for themselves.

Whereas unpleasant as the prospect of reading a *Paradise Lost* or *War and Peace* might sound, it is only by reading these documents that others will fully understand that the science simply does not support the decisions made by NMFS. Thank you.

[The joint prepared statement of Dr. Trites and Dr. Knapp follows:]

**Statement of Andrew Trites, Professor and Director, Marine Mammal Research Unit, Fisheries Centre, University of British Columbia; and Gunnar Knapp, Professor of Economics, University of Alaska**

We are two of four scientists who recently completed an independent scientific review of the NMFS November 2010 Biological Opinion of the Fisheries Management Plan for the Bering Sea/Aleutian Islands Management Areas. This written testimony provides background information about our review, followed by the Executive Summary of our report.

**Background of our Review**

Our review was jointly funded by the States of Alaska and Washington in response to widely-expressed concerns about the science in NMFS' 2010 Biological Opinion (the BiOp). In April 2011, the Alaska Department of Fish and Game (ADFG) and the Washington Department of Fish and Wildlife WDFW developed initial terms of reference for the review and selected two panel co-chairs, who in turn selected two additional panel members. We developed the final terms of reference, timeline for our work, and format of our report.

The panel members were:

- Dr. David Bernard (co-chair), a fisheries scientist, biometrician, and private consultant with over 30 years post-graduate experience involving management of commercial and recreational fisheries for salmon and non-salmon species in the Pacific Northwest.
- Mr. Steven Jeffries (co-chair), a Research Scientist and marine mammal specialist for the Washington Department of Fish and Wildlife, with more than 30 years of experience working on a variety of Northwest marine mammal issues.
- Dr. Andrew Trites, Professor and Director of the Marine Mammal Research Unit in the Fisheries Centre at the University of British Columbia, who has

conducted extensive research on the ecology, population biology and bioenergetics of marine mammals.

- Dr. Gunnar Knapp, Professor of Economics at the University of Alaska Anchorage Institute of Social and Economic Research, who has been engaged in research on fisheries management, seafood markets, and the Alaska economy for the past 30 years.

We conducted our review fully independently. The conclusions expressed are our own and represent our consensus. None of us are federal employees. None of us had any role in developing the BiOp or the FMP. None of us have any personal or financial involvement in any fisheries involved in the BiOp.

We brought a variety of backgrounds and perspectives to our review. One member of the panel (Dr. Trites) has an extensive background in Steller sea lion research, is widely cited in the BiOp, and commented on the draft BiOp and final BiOp. One member (Mr. Jeffries) has extensive experience in sea lion research, marine mammal fishery interactions, and is a member of the Pacific Scientific Review Group. Two members of the panel (Dr. Bernard and Dr. Knapp) had no previous background in or knowledge of Steller sea lion research. Three members of the panel (Dr. Bernard, Mr. Jeffries and Dr. Knapp) had never seen the BiOp prior to beginning work on this review.

Various parties are now involved in litigation relating to the BiOp. Our review has no relationship to that litigation, and we expressed no opinions about the litigation in this review, or about any legal questions related to the BiOp or the EA/RIR (Environmental Assessment/Regulatory Impact Review). We focused strictly on the scientific questions in our Terms of Reference.

We held two public hearings to provide an opportunity for the public to provide comments for our consideration. We also invited and received written comments.

Our full 111-page review is posted on the website of the Washington Department of Fish and Wildlife at: [http://wdfw.wa.gov/conservation/steller\\_sealions/](http://wdfw.wa.gov/conservation/steller_sealions/)

#### **Summary of our Independent Scientific Review of the Biological Opinion**

We were charged as a review panel to answer a series of questions concerning the BiOp and its central conclusion of jeopardy:

*“After reviewing the current status of critical habitat that has been designated for the western population of Steller sea lions, the environmental baseline for the action area, the proposed action for Alaska Groundfish in the Bering Sea and Aleutian Islands and Gulf of Alaska, and the cumulative effects, it is NMFS’ Biological Opinion that the action, as proposed, is likely to adversely modify the designated critical habitat for the western DPS of Steller sea lion.” [BiOp, xxxiv]*

We answered each of the specific questions in our terms of reference (see Chapter 10). For this Executive Summary, however, we have grouped our findings into four categories pertaining to:

- the finding of jeopardy of extinction or of adverse modification of habitat (collectively JAM) for groundfish fisheries in the western and central Aleutian Islands;
- the effectiveness of reasonable and prudent alternatives (RPAs) to the federal action under consultation;
- the requirement under the Environmental Policy Act (EPA) that RPAs in the BiOp be the least-cost choice from all efficacious RPAs; and
- consideration of public and peer comment in the writing of the BiOp.

In our review, we looked for consistencies and inconsistencies between data and conclusions in the BiOp based on our experience, knowledge of the relevant scientific literature, and relevant public comments. Besides information referenced in the BiOp, we considered recently published scientific papers, recent stock assessments, and recent groundfish surveys. We also considered comments by industry, scientists, and the North Pacific Management Council through their Scientific and Statistical Committee concerning the BiOp in general and specific modifications to RPAs, as well as comments submitted to us at public hearings held 2 June, 2011 in Seattle and in Anchorage on 22 August, 2011 and by e-mail.

#### *The Finding of Jeopardy*

We do not agree with the finding of JAM (jeopardy of extinction and adverse modification of habitat) for Steller sea lions in the western and central Aleutian Islands as concluded in the BiOp for the FMP. We find that NMFS misinterpreted crucial evidence from statistical studies of relationships between fishing and sea lion demographics. NMFS also failed to scientifically support their explanation of how fisheries affected sea lions (fishery-driven nutritional stress), and disregarded or misreported evidence that refutes the fishery-driven nutritional stress hypothesis.

And finally, NMFS did not seriously consider alternative ecologically mediated explanations for declines in sea lion numbers not involving fisheries (environmentally-driven nutritional stress and the killer whale predation hypotheses).

Statistical analyses are the starting point for examining the relationship between fishing and Steller sea lions. If fisheries adversely affect sea lion numbers, statistically significant negative associations should be detectable between measures of fishing and measures of sea lion numbers. Failing to find any such associations should lead to a conclusion that there is no adverse effect unless there are clear reasons why the effects would not be observable in the data (*e.g.* measurement error, insufficient variation, or low power). Eight studies looking for such statistical associations were cited in the BiOp. NMFS concluded results from these studies to be “equivocal” and that “*it is not possible. . .to conclude that commercial fisheries are not having a significant impact on the recovery of [sea lions]*”. We found these studies insightful and their results hardly “equivocal”.

We undertook a meta-analysis of the eight statistical studies cited in the BiOp plus two additional studies. The tests in earlier studies were based on a few years of data, and as expected, resulted in mostly non-significant outcomes with a few negative and a few positive associations being statistically significant. These results can be considered equivocal. Studies published after 2000 involved more years and consequently had more power to detect an association between fisheries and Steller sea lions. Results from these studies for years prior to 2000 were less equivocal in that 40% of tests produced statistically significant associations that were scientifically consistent with fisheries *having had a negative impact* on Steller sea lions; the remaining tests (60%) had statistical outcomes that were scientifically consistent with fisheries *not having had a negative impact* on sea lions. All of the detected statistical associations for years prior to 2000 were weak. However, results for years after 2000 are unequivocal. *None of these studies found statistically significant associations consistent with harm by fisheries, that is, 100% of the tests resulted in outcomes consistent with the groundfish fisheries having had no effect on sea lion numbers in the last 10–20 years.* Power analyses in these latter studies and the results themselves show that even weak statistical associations would have been detected had they been present. The methodological issues brought forward through comments to the draft BiOp concern statistical significance in tests when significance is not warranted. None of the issues would make an association less likely to be detected.

For a specific scientific hypothesis that fisheries negatively impact sea lion numbers, significant negative associations between fishery and sea lion statistics are evidence that this hypothesis is *possibly true*. Non-significant and statistically significant positive associations are evidence this hypothesis is *probably false*. What the meta-analysis provides is evidence that a scientific hypothesis that fisheries had a negative impact on Steller sea lions of the WDPS in general, and specifically on sea lions in the western and central Aleutian Islands, was *possibly true* in the past, but in the last 10–20 years, this hypothesis is *probably false*. On this basis we find that not only is it possible “*that commercial fisheries are not having a significant impact on the recovery of [sea lions]*”, but the proposition that fisheries are not negatively affecting Steller sea lions is highly likely.

In our judgment, the fishery-driven nutritional stress hypothesis proffered by NMFS as an explanation for population declines in the western and central Aleutian Islands should be scientifically rejected. We base our conclusion on the process and conditions specified in the decision trees given in the BiOp for determining the risk of exposure and subsequent nutritional stress [BiOp; Figures 4.24, 4.25]. The BiOp drew some incorrect conclusions as it navigated through its own decision tree to arrive at the finding Atka mackerel and Pacific cod fisheries were fisheries of concern. The BiOp also ignored evidence contradicting the hypothesis of fishery-driven nutritional stress.

The available data and analyses indicate that current harvest rates of Atka mackerel have been too low, and the population of Pacific cod has been too small for the fishery on either species to cause nutritional stress in sea lions. Modeling efforts by NMFS reported in the BiOp support this observation, especially the lack of an effect of the Pacific cod fishery on sea lion biomass. Attempts in the BiOp to show spatial overlap between catches in fisheries and diets of sea lions, and hence local depletion of prey, failed to convincingly do so. Uncertainty in estimates of forage biomass is large and was ignored in the BiOp. Other measures of possible competition between fisheries and sea lions (*e.g.*, size overlap, temporal overlap, depth overlap) were specified in the BiOp, but not investigated. We provide data that were not presented in the BiOp showing limited overlap in sizes of fish taken in fisheries and by sea lions, especially limited in regards to Pacific cod. Steller sea lions ate younger, smaller fish than fisheries caught.

Arguments presented in the BiOp that Steller sea lions are experiencing nutritional stress caused by a lack of groundfish are not convincing. Forage ratios of groundfish to sea lions were higher in the western and central Aleutians than in regions where sea lions are recovering, thereby indicating a quantity of groundfish area-wide sufficient for sea lions to avoid nutritional stress. Sea lions in the eastern Bering Sea and the Gulf of Alaska (GOA) show no signs of nutritional stress despite having forage ratios within critical habitat that are lower than in the western and central Aleutian Islands.

Direct evidence of sea lions being in nutritional stress is lacking in the BiOp. We compared the signs of fishery-driven nutritional stress listed in Figure 4.26 of the BiOp with data provided in Table 3.17 of the BiOp. Of the eight general conditions consistent with fishery-driven nutritional stress in sea lions, no recent information (after 2000) was available on four. Nutritional stress was not indicated for three conditions (sea lions were not emaciated, body size was not reduced, and survival was not reduced). Information on the final general condition (reduced reproduction) was contradictory.

Considering the compelling evidence that the amounts of prey are sufficient to support sea lions in the western and central Aleutian Islands specifically, and for the western population in general, it should not be surprising that direct evidence for fishery-driven nutritional stress could not be found as posited. Making two “yes” decisions at the only two operable decision points of the decision process laid out in Figure 4.25 of the BiOp should have ended in a decision of “No Nutritional Stress”. Such a decision would have been consistent with the results of the meta-analysis on statistical studies described above.

Of the two leading alternate hypotheses to explain the reduced numbers of Steller sea lions in the western and central Aleutian Islands, we conclude that neither the hypotheses of environmentally-driven nutritional stress (the “*junk food*” hypothesis) or killer whale predation can be scientifically rejected with available data. Both hypotheses remain viable explanations of sea lion demographics. Of the five necessary conditions for acceptance of the “*junk food*” hypothesis, there is evidence supporting one (good pup condition) in the western and central Aleutian Islands. There is no information on three of the other necessary conditions (good adult body condition, short foraging trips, and older age at weaning for pups) and ambiguity on the fourth (low birth rates).

While the BiOp contained no conclusion as to rejecting or not rejecting the “*junk food*” hypothesis, the BiOp did state “*killer whale predation can be an important factor in either causing continued declines or contributing to a robust recovery [of sea lions].*” We interpret this statement as implying that the killer whale predation hypothesis cannot be rejected at this time. We concur.

#### *Effectiveness of RPAs*

Based on the evidence presented in the BiOp, we conclude that the proposed RPAs will not arrest the decline in the numbers of sea lions in the western and central Aleutian Islands. Evidence presented in this BiOp from multispecies modeling indicates that any future increase or stabilization in sea lion biomass in the western and central Aleutian Islands will *not* be due to restricting fisheries for Pacific cod. There is some modeling evidence in the BiOp indicating that halting fishing for Atka mackerel in the western and central Aleutian Islands might cause sea lion biomass to increase, but it is inconsistent with the data on forage ratios showing greater declines of sea lions are associated with greater relative biomasses of groundfish. The BiOp does not consider this possibility—that increased amounts of groundfish might have negative consequences to sea lions as postulated by the “*junk food*” hypothesis.

Aydin (2010) predicted a 6% increase in sea lion biomass with a 10% reduction in the mortality rate for Atka mackerel. His model assumed that sea lions can assimilate the increase in Atka mackerel biomass, but did not consider that young sea lions can become full on low-energy diets before they have attained enough energy to meet their daily needs (see Rosen and Trites 2004).

The virtual 10 percentage point reduction in Atka mortality projected by Aydin (2010) represents closure of the fishery (which harvests 8% of the stock) plus an additional two percentage point reduction in the mortality rate for this species. Unfortunately certain critical bits of information relative to evaluating this finding were not included in the BiOp. Most notably, the BiOp did not explain or discuss:

- How could mortality rates on Atka mackerel be further reduced beyond the closure of the virtual fishery?
- How many years would be needed to realize virtual increases in sea lion biomass?
- Would these virtual increases persist?

- What would the virtual effect of closing both cod and mackerel fisheries be on sea lion biomass?

Without such information, the relevance of these simulations involving closing the Atka mackerel fishery cannot be fully evaluated. However, this full evaluation would probably be of marginal value, considering the lack of evidence for the fishery-driven nutritional stress hypothesis (our Chapter 4) and the meta-analysis of statistical studies we described in Chapter 3 showing no negative effects of fishing for Atka mackerel in the western and central Aleutian Islands on sea lion demographics in the last 20 years.

Results from multispecies models can provide insights into the effectiveness of RPAs even though the models used in the BiOp were not well explained. The food web containing fish, fisheries, and sea lions must be modeled as a whole if the best ecological information (scientific data) is to be used. While such modeling is at the edge of current understanding of the ecosystem in the Aleutian Islands, such modeling directly addresses the objective of the consultation, which is the response of sea lions to implementation of the RPAs.

In the BiOp, NMFS appears to have eschewed multispecies modeling in favor of the simple dictum that “what worked there and then, will work here and now”—with the “there” being the Gulf of Alaska, the “then” being when RPAs from two previous BiOps were implemented, and the “here” being the western and central Aleutians. Such a simple approach is empirical in that it depends on personal experience and belief, and does not use the scientific method. In other words, the expectation that the RPAs will result in increased numbers of Steller sea lions was not determined using science.

Sea lion numbers in the Gulf of Alaska (GOA) increased following implementation of RPAs in the 1990 and early in the last decade. However, no evidence was given in the BiOp that this increase in sea lions was other than coincidental with management actions. Evidence in the BiOp from multispecies modeling for the GOA indicate that the increase in sea lion numbers was a coincidence in the last decade and was not due to fishery restrictions. While NMFS did use single-species modeling of prey species to show the effectiveness of proposed RPAs—their results were pre-ordained by the model they chose. Thus the models do not support the unscientific premise of the BiOp that RPAs had worked in the past, and would therefore continue to be effective if implemented elsewhere. There is insufficient evidence that past RPAs were ever effective.

The reason given in the BiOp for forgoing a scientific investigation in favor of an unscientific argument is that multi-species modeling is too complex and subject to too much error. We disagree. By its very nature, the fishery-driven nutritional stress hypothesis requires consideration of the fishery and sea lion food webs. Ecosystem considerations and modeling of the food web is a must for developing RPAs if the BiOp accepts the fishery-driven nutritional stress hypothesis. Such modeling is complex and does have uncertainty in outcomes. However, a good scientific investigation would include measures of uncertainty in parameters, in initial conditions, and in environmental conditions. It would also include an analysis of the sensitivity of results to model structure; and would report results in probabilistic terms.

We believe that NMFS has the resources to conduct ecosystem modeling, yet relied on the simplest of arguments to support the RPAs they proposed. Arguing that sea lions must be nutritionally stressed because fishing has occurred where sea lions have declined is prone to error in the most obvious of ways by confusing cause with coincidence.

#### *Economic Analysis of RPAs*

In general, the analysis described in the Environmental Assessment and Regulatory Impact Review (EA/RIR) of economic impacts of the chosen set of RPAs is reasonably complete, scientifically valid and adequate. It addresses most of the questions it should have addressed in an objective and reasonable manner given the limits of available data and confidentiality restrictions. It supports the conclusion that “. . . this action will impose relatively heavy costs on the fishing and processing industry that targets Atka mackerel and Pacific cod in the Aleutian Islands.” More detailed analysis might have strengthened but not have changed this fundamental conclusion.

The EA/RIR includes an analysis of the economic benefits of full Steller sea lion recovery. This is not an analysis of the economic benefits attributable to the uncertain effects of the alternatives. The EA/RIR does not provide a cost-benefit analysis of the alternatives.

The BiOp and RIR failed to demonstrate that the RPAs minimize economic and social impacts compared with potential alternatives which would achieve the same benefit for Steller sea lion recovery. Neither document could demonstrate this be-



cause neither demonstrated what the benefits of the RPAs would be for sea lion recovery, or demonstrated an effort to identify alternatives that would have the same level of benefit but lower economic and social impact.

*Standard for Likelihood of Jeopardy*

The BiOp responds to the mandate in the ESA that “*Each Federal agency shall. . .ensure that any action. . .is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat. . .*” In reaching or evaluating any conclusion about jeopardy, a key issue is what standard of scientific evidence is required to conclude that an action is “likely” to jeopardize the continued existence of an endangered species or result in the destruction or adverse modification of its habitat.

There is no formal scientific standard for “likely.” Given a high degree of uncertainty about whether fishing jeopardizes Steller sea lions, we contend that most scientists would define a *scientific* standard for “likely” based on their interpretation of the *preponderance of available evidence*. This is the standard we used for our review.

The BiOp does not explicitly define its standard for “likely.” Implicitly, it uses a standard which is significantly weaker than the scientific standard of preponderance of evidence.

Representatives of NMFS argue that the Endangered Species Act mandates a precautionary standard for “likely” and that evidence that adverse effects of fishing on Steller sea lions “may exist” requires a conclusion of jeopardy. We claim no expertise as to the appropriate *legal* standard for a conclusion of jeopardy. However, whatever the standard, it should be explicitly defined, and the scientific evidence should meet that standard.

*Peer and Public Comment*

The BiOp was prepared by NMFS without active interaction with scientists outside the agency or with people in the fishing industry that could have provided useful insights. The period of time provided by NMFS for comment on the draft BiOp was insufficient for serious peer and public review. The time between the receipt of review comments and NMFS’s self-imposed deadline for release of the final document was also insufficient for adequate consideration of review comments or any substantial revision of the BiOp in response to comments. There is little evidence that comments on the draft BiOp’s finding of jeopardy were seriously considered when developing the final BiOp. There is evidence that comments on RPAs in the draft BiOp were considered in developing the final RPAs, although responses to these comments were very brief and most suggested changes were rejected. NMFS did not summarize or address comments received on the draft BiOp as had been promised, nor has it scheduled a formal independent review as promised. In contrast, the Regulatory Impact Review (RIR) clearly addressed and was strengthened by consideration of public and peer comments on the economic analysis.

Mr. HASTINGS. Thank you, Dr. Trites. I appreciate your testimony.

Next, we will go to Dr. Gunnar Knapp, who is a Professor of Economics at the Institute of Social and Economic Research at the University of Alaska Anchorage. Dr. Knapp, you are recognized.

**STATEMENT OF GUNNAR KNAPP, PROFESSOR OF ECONOMICS,  
INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH, UNIVERSITY OF ALASKA ANCHORAGE**

Dr. KNAPP. Thank you. My name is Gunnar Knapp. I am a Professor of Economics at the University of Alaska Anchorage’s Institute of Social and Economic Research, where I have been engaged for the past 30 years on research about the fisheries management, fisheries markets, and the Alaska economy. I also participated in this independent scientific review of the BiOp.

I would like to highlight a few findings of our review that have to do with the BiOp standard for likelihood of jeopardy, the economic analysis associated with the BiOp, and NMFS’ consideration of peer and public comment.

Beginning with the standard for likelihood of jeopardy, the Endangered Species Act mandates that each Federal agency shall ensure that any action is not likely to jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat.

So, in reaching or evaluating any conclusion about jeopardy, a key issue is what standard of scientific evidence is required to conclude that an action is “likely” to jeopardize the continued existence of the species or result in the destruction or adverse modification of its habitat.

Now, there is not any formal scientific standard for likely, but most scientists would base a conclusion about whether or not something is likely based on their interpretation of the preponderance of available evidence. The BiOp’s conclusions are not based on the preponderance of scientific evidence; rather, the conclusion of jeopardy is based on the possibility that fishing might affect Steller sea lions, or that that possibility cannot be excluded.

So, for example, here is some of the language from the BiOp’s conclusions about its conclusion of jeopardy. “Analysis of available data indicate that an adverse relationship between Steller sea lion and the commercial fisheries may exist,” or, “Fishery removals of prey in the Western and Central Aleutian Islands sub-region may be adversely affecting the Western DPS,” or, “The possibility that this interaction may be one of several primary causes of the observed declines in non-pup counts cannot be eliminated.”

What this means in effect is that NMFS is not basing its conclusions on the preponderance of scientific evidence. The possibility that an effect could exist trumps the fact that there is almost no scientific evidence that it does exist.

Now, NMFS argues that it is legally mandated to be precautionary in its evaluation of the science. We do not claim any expertise on how NMFS is legally mandated to evaluate the evidence. But if you use the argument that you cannot prove that fishing does not have an effect to trump the available scientific evidence, it is hard for scientists or the public to understand the reasoning, and it is also hard to call it science.

Next, I will comment on the economic analysis associated with the regulatory impact analysis that accompanied the BiOp.

In general, the analysis of the economic impacts of the RPAs is reasonably complete, scientifically valid, and adequate. It correctly concludes that this action will impose relatively heavy costs on the fishing and processing industry that targets Atka mackerel and Pacific cod in the Aleutian Islands.

What the analysis does not do is to demonstrate any attempt to reduce economic impacts of the RPAs. NMFS only considered one alternative for RPAs to address its conclusion of jeopardy. It invited almost no input from industry about whether there might be a less costly way to achieve the same benefits for Steller sea lions. And that is a striking contrast with the collaboration that occurred in developing the RPAs for the 2001 BiOp through the work of the North Pacific Fishery Management Council’s Reasonable and Prudent Alternatives Committee.

Finally, I will address NMFS’ consideration of peer and public comment in preparing the BiOp. The BiOp was prepared by NMFS

without active interaction with scientists outside the Agency or with people in the fishing industry who could have provided useful insights. The period of time provided by NMFS for comment on the draft BiOp was insufficient for serious peer and public review.

The time between the receipt of review and NMFS' self-imposed deadline for release of the final document was also insufficient for adequate consideration of review comments for any substantial revision of the BiOp in response to comments.

There is little evidence that comments on the draft BiOp's finding of jeopardy were seriously considered when developing the final BiOp.

Finally, NMFS did not address or summarize comments received on the draft BiOp as had been promised, nor has it yet undertaken any formal independent review. Why does this matter? The BiOp addresses very complex issues. Even for good scientists, understanding these issues is difficult without actively interacting with and learning from other people who have insights about the issues and data, including both independent scientists and people in industry.

Listening to comments does not mean you have to agree with the people who are commenting, but if you do not listen to comments, there is a much higher chance that you will make mistakes and miss or misinterpret relevant evidence. Good science actively seeks review. In preparing the BiOp, NMFS avoided review.

Thank you.

Mr. HASTINGS. Thank you very much, Dr. Knapp.

And next, we will go to Dr. Ragen, Executive Director of the U.S. Marine Mammal Commission. Dr. Ragen, you are recognized.

**STATEMENT OF TIM RAGEN, EXECUTIVE DIRECTOR,  
U.S. MARINE MAMMAL COMMISSION**

Dr. RAGEN. Thank you, Chairman Hastings and Congressman Young, for the privilege of appearing before you on this matter.

I am Tim Ragen. I am the Executive Director of the Marine Mammal Commission. From 1998 to 2000, I was the Steller sea lion Recovery Coordinator for NOAA Fisheries based in the Alaska region.

Section 7 are critical to the way that we manage these fisheries, and I have focused my testimony on the process by which we conduct those consultations. I will just make a few points this morning.

First of all, with regard to information, I think the most meaningful opportunity for all participants in this issue, all the various parties, is to share information or input into this process. In fact, there are massive amounts of information available on the topic, and as a rule, parties should be able to provide input into the Section 7 consultation.

Transparency is critical, and one way to promote transparency is through the open sharing of information. However, NOAA must weigh all of that information based on its relevance and quality.

With regard to analysis of effects, the fundamental question here is whether there is a clear and reasoned relationship between the available information and the effects analysis. And my guess is that much of what you will hear and be interested in today per-

tains to the question of whether or not NOAA arrived at its conclusions given the information available to it.

Compiling and analyzing all the data is a daunting task, and with the exception of one major point, the Commission supports NOAA's analysis.

Decision making. My third point involves decision making in the consultation process. First, other agencies and organizations can and should conduct their own reviews and form their own conclusions. But those reviews and conclusions are not a substitute for the responsibilities of the consulting agency.

If you look back over the past decade, you will see a long series of reviews, and although they may be helpful, they do not usurp or in any way diminish NOAA's responsibilities.

That brings me to the role of the Council. I believe the Council has a very important role in the consultation process as a source of information, a facilitator of coordination, a supporter of research, and a forum for developing management measures to meet standards imposed by NOAA Fisheries.

However, the constitution of the Council is such that it is subject to conflicts of interest, and for that reason, it does not have and should not share the responsibilities of a consulting agency for decision making purposes.

My last two points are my most important. With regard to the recovery plan criteria, the recovery plan laid out three general principles for consideration for recovery. One is to continue with research and monitoring. The second is to maintain the same or equivalent protections from fishery effects. And the third was to develop an adaptive management plan for assessing the ecological effects of fishing on Steller sea lions.

In my view, NOAA Fisheries and Fisheries Management generally have not developed an adequate adaptive plan for assessing the ecological effects of fishing. This is a major shortcoming of the Agency's current approach to fisheries management. Our fishing strategy under the Magnuson-Stevens Fishery Conservation and Management Act is based on the concept of an optimum view, but optimum is defined in terms of the maximum sustainable yield as reduced by any relevant social, economic, or ecological factor.

Although we have a relatively good understanding of the theory behind MSY and its effects in a single species context, we do not have a good understanding of it in an ecological context. Again, NOAA has not developed the kind of adaptive research and management program to clarify those facts. Doing so would be a considerable challenge and would require cooperation from all interested parties. But until we do so, and by we I mean all interested parties, I fear we will continue to engage in the kind of back and forth debates that are undermined by this ecological uncertainty.

Doing so likely imposed unnecessary constraints on the fishing industry, and exposes our marine resources to unnecessary risk. Unless we tackle this challenge, we will simply end up foisting it on to the future generations for them to deal with. I would like to think that none of us consider that the best plan forward.

Again, Chairman Hastings, thank you for the opportunity of appearing before the Committee, and I look forward to your questions and thoughts.

[The prepared statement of Dr. Ragen follows:]

**Statement of Timothy J. Ragen, Ph.D., Executive Director,  
Marine Mammal Commission**

Chairman Hastings, members of the House of Representatives Committee on Natural Resources, thank you for inviting me to testify before you on “NOAA’s Steller Sea Lion Science and Fishery Management Restrictions: Does the Science Support the Decisions?” I am Timothy Ragen, Executive Director of the Marine Mammal Commission. From 1998 to 2000, I served as the Steller Sea Lion Recovery Coordinator for the Alaska Region, National Marine Fisheries Service. In that position, I was responsible for drafting a number of biological opinions on fishery effects on sea lions under section 7 of the Endangered Species Act.

**Section 7 consultations**

Debates regarding the nature and quality of NOAA’s science are heightened during section 7 consultations concerning fishery management, as is evident from the number of law suits related to consultations over the past decade. The Marine Mammal Commission’s concerns regarding those consultations fall under three separate but related headings.

**Information management:** With regard to managing the information needed for section 7 consultations, the Commission believes that—

- Consultations should be based on the best scientific and commercial data available;
- All affected parties should be allowed to contribute information to the consultation process as long as it is related to the proposed activity and falls within the limits established by the Endangered Species Act;
- Such parties could include state agencies, fishery management councils, the industry, tribal governments or organizations, non-governmental conservation organizations, and the public;
- Information management should be transparent—that is, the information used in a section 7 consultation should be available for all to see (with some exceptions for certain classes of information, e.g., national security information); and
- The information involved in such consultations should be weighted by its relevance and quality, and clear standards are needed to do so.

**Analysis of effects:** For a variety of reasons, analysis-of-effects chapters of biological opinions often are the weakest elements of section 7 consultations. Here, the Commission believes that—

- Such analyses must be comprehensive, including assessment of cumulative effects;
- They must be clearly linked to the available information and describe important information that is needed but lacking;
- They must include measures of uncertainty or confidence in their results; and
- They must be described fully in the resulting biological opinion or in available references.

**Decision-making:** Conclusions regarding jeopardy to a species or destruction or adverse modification of critical habitat often are the most controversial elements of a section 7 consultation. The Commission’s main concerns with regard to such decision-making are that—

- Biological opinions resulting from section 7 consultations, and all decision-making therein, remain the responsibility of the expert or consulting agency. However, that agency should work closely with the action agency to ensure that all relevant information is considered in each consultation process;
- The consulting or expert agency must not have a conflict of interest with regard to the proposed action and the outcome of the consultation;
- The National Marine Fisheries Service is in a potentially conflicted position when one branch of the agency consults with another on fishery-related actions; maintaining the integrity of the consultation process is essential and in such cases the agency must impose strong measures and procedures to avoid such conflicts;
- Decisions regarding the two standards of jeopardy to a listed species and destruction or adverse modification of critical habitat must be clearly explained in biological opinions; and
- Decisions and supporting rationale must provide the basis for any reasonable and prudent alternatives needed to avoid jeopardy or adverse modification.
- Although other agencies or organizations may wish to, or may be invited to, conduct reviews of the same information, the expert or consulting agency

alone remains responsible for final decisions in section 7 consultations and the accompanying biological opinions.

Under each of these headings, the Commission's primary concern is with maintaining the integrity of the process as described in section 7 of the Endangered Species Act.

#### **Role of the North Pacific Fishery Management Council**

Section 7 consultations on the management of Alaska groundfish fisheries clearly are relevant to the North Pacific Fishery Management Council. Given its important role in fishery management, the Council should have ample opportunity to provide information considered during section 7 consultations. The Council also may play a number of other important roles:

- It may serve as a conduit through which the industry can provide input;
- It may serve as a forum for helping to develop reasonable and prudent alternatives as long as the framework and/or standards for those measures are clearly articulated by the consulting agency—in this case, NOAA Fisheries' Office of Protected Resources;
- It also may serve as a forum for developing and recommending research to address important uncertainties; and
- It may help foster cooperation between research organizations and the industry.

However, the Council is not part of the consulting or expert agency and should not assume the responsibilities of the consulting or expert agency because it is subject to potential conflicts of interest.

#### **Recovery Plan Criteria**

Ultimately, the purpose of the recovery plan is the same as the purpose of the Endangered Species Act: “. . .to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species. . ..” More specifically, the recovery plan should include reasoned criteria for determining when the species of concern is no longer at risk of extinction and when the protections provided under the Endangered Species Act are no longer needed. The Commission believes that the Steller Sea Lion Recovery Team and the National Marine Fisheries Service should have given more weight to the population viability analysis used to support the recovery criteria. Such analyses provide the best possible indication of the risk of extinction, which is the key measure of success in the management of endangered and threatened species under the Act. That being said, the recovery plan criteria were based on a reasoned analysis of the five listing factors set forth in the Endangered Species Act. In addition, the criteria gave appropriate emphasis to three important principles calling for—

- (1) Continued population monitoring and research on the key threats potentially impeding sea lion recovery;
- (2) Maintaining current or equivalent fishery conservation measures until new information indicates that changes are warranted; and
- (3) Designing and implementing an adaptive management program to evaluate fishery conservation measures.

In the Commission's view, the third principle has not been given adequate consideration in fisheries management. In the Alaska groundfish case, a disproportionate share of research has been focused on Steller sea lions, without adequate attention to assessing the ecological effects of fishing to obtain the optimum yield. The Magnuson-Stevens Fishery Conservation Act defines the optimum yield to be based on the maximum sustainable yield as reduced by any relevant social, economic, or ecological factors. However, NOAA Fisheries has yet to develop a robust research program to investigate the ecological effects of such fishing. This fundamental issue has been neglected for several decades and must be addressed if the United States is to assert with justification that its fishery management paradigm is ecosystem-based.

#### **The need for scientific information**

The information used to manage fisheries is not what all parties would like it to be. In the case of the Alaska groundfish fisheries, the primary concern is that the fisheries severely out-compete sea lions for their prey. Such competition may occur in the form of fishery-induced localized depletion of prey, where fishing effort is concentrated in space and time and causes marked reductions in the availability of prey to sea lions. These types of depletions were clearly evident in fisheries data collected in the late 1990s. The other type of depletion results from the long-term effects of harvesting a fish stock year after year, causing intentional reductions of 60 percent

or more in the total stock biomass. This type of effect has not been evaluated but is at the heart of the debate over the ecological effects of fishing.

Regarding the scientific information used to justify the fishery restrictions in the recent biological opinion, the Commission assumes that all parties would like to have better information to guide the development and implementation of fishery management measures. However, the Commission would respectfully suggest that the issue should be rephrased to recognize that the burden for providing the necessary information appropriately lies with the action agency—in this case the Office of Sustainable Fisheries. Section 7(a)(2) of the Endangered Species Act clearly places that burden on the action agency, requiring it to “insure that any action authorized, funded, or carried out by such agency. . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species. . . .”

Gathering the necessary information on the ecological effects of fishing will be a challenge, particularly if research budgets for fisheries-related research remain at current levels or are reduced in the foreseeable future. In the Commission’s view, the best approach for collecting the needed information would be through a long-term, well conceived, and well planned adaptive management approach aimed at investigating the ecological effects of fishing. To the Commission’s knowledge, NOAA Fisheries does not now have such a plan in place.

#### **Conclusion**

The issue to be resolved here involves the ecological interactions between the Alaska groundfish fisheries and Steller sea lions. NOAA Fisheries has done an admirable job of reducing direct interactions between the fisheries and sea lions. However, it has not evaluated, in a suitably rigorous way, the ecological effects of fishing aimed at achieving, on an ongoing basis, the maximum sustainable yield from a single target fish stock. Unless and until it does so, the ecological consequences of fishing under this paradigm will be left for future generations to resolve.

Mr. HASTINGS. Thank you very much, Dr. Ragen.

And our last panelist is Mr. Larry Cotter, Chair of the North Pacific Fishery Management Council, Steller Sea Lion Mitigation Committee, and Chief Executive Officer of the Aleutian Pribilof Island Community Development Association.

Mr. Cotter, you are recognized.

#### **STATEMENT OF LARRY COTTER, CHAIR, NORTH PACIFIC FISHERY MANAGEMENT, COUNCIL’S STELLER SEA LION MITIGATION COMMITTEE AND CHIEF EXECUTIVE OFFICER, ALEUTIAN PRIBILOF ISLAND COMMUNITY DEVELOPMENT ASSOCIATION**

Mr. COTTER. Thank you, Chairman Hastings and Congressman Young. I appreciate the opportunity to testify before you today.

I have been down this road twice before—the National Marine Fisheries Service Biological Opinion road. The first time was in 2001. At that time, the RPA Committee was formed in February with myself as chair. The Committee was given two tasks. The first was to provide the North Pacific Council with draft emergency rules to implement fishery management changes by mid-summer to allow the groundfish fisheries in the Gulf and Bering Sea Aleutian Islands to continue without causing jeopardy or adverse modification. The second role was to provide the Council with draft emergency rules by the fall for subsequent years, so that those fishers could continue, again, without causing jeopardy or adverse modification.

Both of those tasks were successfully completed. In my opinion, this was one of the highlights of fishery management in the North Pacific. An enormous amount of work, cooperation, and collaboration were necessary. Everyone participated, including the Agency.

Protected resources staff were not walled off from us, nor were they walled off from sustainable fisheries. We all worked together, and we got it done.

Somehow the world changed between then and 2006, and then it simply deteriorated continuously. I am going to be very blunt. There was not a single moment of this most recent process when any action by NMFS resembled the development of an unbiased scientific evaluation of Steller sea lions and issues they face regarding recovery.

The Agency was simply on a mission, and they still are. Even Dr. Schwaab includes a series of references to the Steller sea lion recovery team in his testimony to you today concluding with, "NMFS' review of the comments and recommendations submitted by peer reviewers and the public on the 2007 version of the draft revised plan and modified the plan as appropriate to produce the final revised Steller sea lion recovery plan in February 2008."

There is really only one small problem with that. Eight of the 17 recovery plan members signed a letter repudiating the recovery plan, and NMFS continues to this day to pretend that that did not happen. It did.

Our Mitigation Committee paid its own way. Easily in excess of half a million dollars was spent on behalf of the volunteers who sat on the Committee. From the beginning, the process was tortured.

The Committee first started to meet in the winter of 2006. We were told to expect a BiOp in the fall. We met seven times that year. The due for the BiOp was delayed repeatedly until finally it was delayed until June 2008. The Committee met five more times in 2007.

That jeopardy and adverse modification review found in this BiOp was guaranteed, in my opinion, from the beginning. The cornerstone for the recovery plan and ultimately the Biological Opinion is something referred to as Holmes et al. Holmes et al. is a model that was constructed to predict that decreasing pup rates by female sea lions was inhibiting the recovery of the species. In fact, we were told the increases we were observing in the sea lion population would prove to be an anomaly, and would, in fact, start reversing themselves.

NMFS assumed that that study was accurate, and assumed that that study applied to all sea lions throughout their range, despite the fact that the study focused only on one area in the Central Gulf. If the Agency is going to assume that Holmes et al. is accurate and applies across the entire range of the WDPS, then it will be impossible to avoid jeopardy and adverse modification since the population will continue to decline. In essence, the recovery plan, with its down and delisting criteria, were doomed for failure.

I personally pointed this out to major senior members of National Marine Fisheries Service, proclaiming that a train wreck was just around the bend, but no one cared.

A few years later, the Seward Sealife Center, through an individual whose name I am going to mispronounce, Maniskopo, presented a paper that directly contradicted Holmes, et al., by reviewing the photographic proof of female sea lions at Chiswell Island pupping consistently over the preceding eight years. NMFS did everything they could possibly do to debunk this paper. There was no



way they were going to let new scientific information get in the way.

The development of the new BiOp commenced in 2006. NMFS delayed the release of the BiOp 10 times before issuing it in August 2010. Along the way, in late 2009 or 2010, they totally changed their writing staff. They even sought to retain on a sole source contract a former Alaska Region protected resources employee to write the new BiOp. NMFS reportedly offered this individual a six-figure contract to do the job.

That individual, by the way, was then employed by the Department of Energy, and presumably could have been made available on an inter-agency employment loan. I do not know what ultimately happened with that contract.

The next thing that happened was Alaska Regional Director Jim Balsiger rejected the draft BiOp in April 2010. If you think about that, that was really an incredible act of courage. It was then, and remains now, an almost singular clarion call from one person in the Agency to call a spade a spade.

Mr. HASTINGS. Mr. Cotter, if you could wrap up. The time is over. So, if you could—

Mr. COTTER. I am so sorry.

Mr. HASTINGS. Well, your full statement is in the record, so if you would just conclude, I would appreciate it.

Mr. COTTER. I am going to conclude if I can with four questions, and they will be brief.

Mr. HASTINGS. Quickly. Very quickly.

Mr. COTTER. Is the ESA being applied consistently between the Fish and Wildlife Service and the National Marine Fisheries Service? And is it being applied consistently with the regions of both agencies?

How can the delisting criteria for Steller sea lions require a less than one percent if they will go extinct in the next 100 years, and gray wolves only require 10 breeding pairs in four States, or California sea otters, a population excess of 3,000 animals for three consecutive years?

Last, how can Fish and Wildlife Service conclude that transient marine mammal eating orcas are the reason for the collapse of sea otter populations in the Aleutian Islands, yet NMFS concludes predation by the same orcas has no impact on sea lions in the same area? Should this not be—

Mr. HASTINGS. Just the question. Just the question. OK.

Mr. COTTER. Thank you.

[The prepared statement of Mr. Cotter follows:]

**Statement of Larry Cotter, Chairman, North Pacific Fishery Management Council Sea Lion Mitigation Committee, and CEO, Aleutian Pribilof Island Community Development Organization (APICDA)**

Chairman Hastings and Congressman Young: I would like to thank you for inviting me to testify before your committee today. As I believe you are aware I had major back surgery one week ago. That made it impossible for me to complete my written testimony in advance. I apologize for that and have copies available now.

My invitation to testify asked that I share my views, as Chair of the North Pacific Council's Steller Sea Lion Mitigation Committee, regarding the process used to develop the Biological Opinion, my views of the role of the North Pacific Council in the process, my concerns with the recovery plan criteria and my concerns with the science relied upon in justifying the fishery restrictions.

I have been down this road twice with NMFS. The first time was in 2001. At that time the RPA Committee was formed in February with me as Chair. We were given two tasks: the first was to provide the North Pacific Council with draft emergency rules to implement fishery management changes by mid-summer to allow the groundfish fisheries in the Gulf and Bering Sea/Aleutian Islands to continue without causing jeopardy or adverse modification; the second was to provide the North Pacific Council with draft emergency rules to implement fishery management changes by October to allow the groundfish fisheries in the Gulf and Bering Sea/Aleutian Islands to continue operating into subsequent without causing jeopardy or adverse modification.

Both of these tasks were successfully completed. In my opinion this was one of the highlights of fishery management in the North Pacific. An enormous amount of work, cooperation and collaboration were necessary. Everyone participated, including the agency. Protected resources staff were not walled off from us and sustainable fisheries—we all worked together and got smart together.

Somehow the world changed between then and 2006, and then they simply deteriorated. I am going to be very blunt. There was not a single moment of this most recent process when any action by NMFS resembled the development of an unbiased scientific evaluation of Steller sea lions and issues they face regarding recovery. The agency was simply on a mission. They still are. Even Dr. Schwab includes a nice series of references to the Steller Sea Lion Recover Team in his testimony to you today, concluding with “NMFS reviewed the comments and recommendations submitted by peer reviewers and the public on the 2007 version of the draft revised plan and modified the plan as appropriate to produce the Final Revised Steller Sea Lion Recovery Plan in February 2008.” Only one small problem with that statement—8 out of 17 recovery plan team members signed a letter repudiating the recovery plan, and NMFS continues to this day to pretend that didn’t happen.

Our mitigation committee paid its own way. Easily in excess of \$500,000 was spent on behalf of the volunteers who sat on the committee. From the beginning the process was tortured. The committee first started to meet in winter, 2006. We were told to expect a draft BiOp in the fall. We met seven times that year. The due date for the BiOp was delayed repeatedly, until June, 2008. The committee met five more times in 2007.

That jeopardy and adverse modification would be found in this BiOp was guaranteed from the beginning. The cornerstone for the recovery plan and ultimately the BiOp is something referred to as Homes, et al. Homes et al is a model that was constructed to predict that decreasing pup rates by female sea lions was inhibiting the population recovery of the species. In fact, we were told the increases we were observing in the sea lion population would prove to be an anomaly. NMFS assumed the study was accurate, and assumed it applied to all sea lions throughout their range—despite the fact that the study only focused on one area in the central Gulf of Alaska.

If the agency is going to assume that Holmes et al is accurate and applies across the entire range of the WDPS, then it will be impossible to avoid jeopardy and adverse modification since the population will be continuing to decline. In essence, the Recovery plan with its down and de-listing criteria were doomed for failure. I personally pointed this out to the most senior members of NMFS, proclaiming that a huge train wreck was now just around the bend, but they were contentedly fixed on their position.

A few years later the Seward Sea life Center presented a paper that directly contradicted Homes et al by reviewing the photographic proof of female sea lions at Chiswel Island pupping consistently over the preceding eight years. NMFS did everything they could possibly do to debunk this paper. There was no way they were going to let new scientific information get in their way.

The development of the new BiOp commenced in 2006. NMFS delayed the release of the BiOp ten times before finally issuing it in August, 2010. Along the way—in late 2009 or early 2010—they totally changed their writing staff. They even sought to retain on a sole source contract a former Alaska Region Protected Resources employee to write the new BiOp. NMFS reportedly offered this individual a six figure contract to do the job. That individual, by the way, was then employed by the Department of Energy and presumably could have been made available on an intra-agency employment loan. I do not know what ultimately happened with that contract.

The next thing that happened was Alaska Regional Director Jim Balsiger rejected the draft BiOp in April, 2010. If you think about it, that was really an incredible act of courage. It was then and remains now an almost singular clarion call from one person in the Agency to call a spade a spade—this BiOp process has failed!

Unfortunately, there was no time to start the process anew and do it right. The environmental NGO litigants were pounding on the door at NOAA in Washington DC—do it our way or we sue. So, having no choice, Dr. Balsiger put together a new BiOp team that spent the next four months pounding together the best, flawed BiOp they could. 4

This was a crazy, frantic, keystone cops type of process that clearly violated the APA, NEPA Magnuson-Stevens Act and other laws. NMFS was not focused on sound science—they simply had to get jeopardy/adverse modification BiOp in place before the environmental NGOs would sue. This was political, pure and simple. And incompetently handled. The Agency should be ashamed of themselves. And thank you for the hearing, but what we really need is a whole scale investigation.

In conclusion, I do think some question must be posed and answered:

1. Is the ESA being applied consistently between the Fish & Wildlife Service and the National Marine Fisheries Service, and is it being applied consistently within the regions of both agencies?
2. How can the delisting criteria for Steller sea lions require a less than one percent chance that they will go extinct in the next 100 years, and grey wolves only require ten breeding pairs in for states, or California sea otters simply need a population in excess of 3,000 animals for three consecutive years?
3. How can Fish & Wildlife Service conclude that transient marine mammal eating orcas are the reason for the collapse of sea otter populations in the Aleutian Islands (resulting in their status as endangered), yet NMFS concludes predation by the same orcas has no impact on sea lions in the same area? Shouldn't this be an issue to be resolved and agreed upon by these two agencies?
4. How is it that the Seward Sea Life Center is able to do such high quality research on sea lions in Russia when NMFS can never find the time to do anything in the western Aleutians?
5. Should it mean anything to discover what we already know—there is no commercial fishing with 50 miles of the Komondorski Islands just west of our Aleutian Islands, and their sea lions are apparently doing the same thing as ours.

Thank you.

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Mr. HASTINGS. Thank you, Mr. Cotter. And I want to thank all of you for your testimony.

Dr. Trites, you alluded to this several times in various ways in your testimony what I am going to ask you. And the BiOp appears to rely significantly on the research that you have done. So, my question to you is really pretty direct in that regard.

Do you believe that NOAA correctly interpreted your data, and are the NOAA conclusions supported by your research?

Dr. TRITES. I guess the short answer is, no. We have published through the research that I have worked with a lot of research, and that research is cited in the BiOp. But there are different ways of citing information. One is you can just put the author's name and list the paper, or you can actually reference the work and try to put some understanding into it.

And I would say for the most part, the BiOp is a fairly complete list of the scientific record in terms of what was studied. But in terms of how they chose to expand the sub parts, overlook others, and, in some cases, even misinterpret what was published, it has got those shortcomings.

Mr. HASTINGS. Well, you alluded to that. That is why I asked the question directly.

Dr. Knapp, you also talked about economics. So, do you believe that any future review of any BiOp should include a review of all the economic impacts?

Dr. KNAPP. Yes, I certainly believe that when you are studying economic impacts, you should study all the economic impacts.

Mr. HASTINGS. OK. And if I heard your testimony correct, there were some major parts were left out of this, is that correct?

Dr. KNAPP. My main point actually was the—I actually do not have any particular criticism of the analysis of the economic impacts that was done. There was an analysis done, and it looked at many different kinds of impacts, and came to the conclusion that they were quite substantial from these RPAs.

The major point that I wanted to make was that there was no evidence whatsoever of any attempt to ask the question, how can we reduce these economic impacts. Is there a way to do this that would have a lower economic impact.

Mr. HASTINGS. Which falls under the category of looking at all economic impacts. I mean, clearly if you are going to have some impact, then what is potentially to mitigate that. That is what you are saying, is that correct?

Dr. KNAPP. Yes, sir.

Mr. HASTINGS. OK. I agree with that.

Dr. Ragen, you said there is one thing you do not agree with on the BiOp. What is that?

Dr. RAGEN. Mr. Chairman, if you look at the types of analyses that go into fisheries' effects, most of them are focused on the effects of removal within a given year. Our strategy under the maximum sustainable yield approach is to reduce the biomass of the target species by roughly 60 percent.

The analyses that are often done in fisheries management do not deal with that. They look at the 10 percent, so that over time, because these are age structured stocks, if you have knocked the biomass down by 60 percent, and then you only focus on taking 10 percent of that remaining 40 percent, I think you have missed what is probably the major driver in terms of fishery effects; that is, the nature of fishing under the MSY paradigm. We have never really examined the ecological effects of those kinds of reductions.

Mr. HASTINGS. Why? Why has that not been done?

Dr. RAGEN. I do not understand that, and that was one of the key questions that really came up in the 2000 Biological Opinion is, what are the impacts of removing 60 percent of Pacific cod, Atka mackerel, flat fish, et cetera, on an ecosystem.

Mr. HASTINGS. Let me ask you another question because maybe this lends into what you are talking about. Because new information has been referenced several times, available since the BiOp on the Atka mackerel stock assessment, do you believe that the Agency has responsibility to re-initiate consultation based on this new information? I think that is in line with what you are saying.

Dr. RAGEN. I think the Agency has to look at all of its new information to decide whether or not it is significant enough for a renewal. You have to recognize that the information on these stocks that is available in any given year or any given season is going to change, and they will need to look and see does this warrant a re-examination of their overall approach.

So, surely they should be tuned into new information, but I also would not say outright that any time there is new information, they should start a consultation, or they would be locked into—

Mr. HASTINGS. Unless it is significant, I suppose that is in the eye of the beholder, is that correct?

Dr. RAGEN. I think they have to make their best judgment in terms of what the—

Mr. HASTINGS. Which unfortunately does not make it objective; it makes it subjective potentially.

Dr. RAGEN. I do not think it necessarily means that you are being subjective. I think you need to look at the information and say what constitutes sufficient new information to make a decision. And that sort of thing is best served by making that judgment in advance.

Mr. HASTINGS. My time has expired. Mr. Young?

Mr. YOUNG. Thank you, Mr. Chairman.

Mr. Cotter, would you repeat those last four questions you were going to read? Because they are good questions, I want them in the record totally.

Mr. COTTER. The first question is, is the ESA being applied consistently between the Fish and Wildlife Service and the National Marine Fisheries Service, and is it being applied consistently within the regions of both agencies?

The second question, how can the delisting criteria for Steller sea lions require a less than one percent chance that they will go extinct in the next 100 years, and gray wolves only require 10 breeding pairs in four States, or California sea otters simply need a population in excess of 3,000 animals for three consecutive years?

Third question. How can Fish and Wildlife Service conclude that transient marine mammal eating orcas are the reason for the collapse of sea otter populations in the Aleutian Islands resulting in their status as endangered, yet NMFS concludes predation by those same orcas has no impact on sea lions in the same area? Should this not be an issue that demands to be resolved and agreed upon between the two agencies.

The fourth question, how is it that the Seward Sealife Center is able to do such high quality research on sea lions in Russia when NMFS has difficulty getting anything done in the Western Aleutians.

And the last question, should it mean anything to discover what we already know? There is no commercial fishing within 50 miles of the Komandorski Islands just west of our Aleutian Islands. And their sea lions are apparently doing the same thing as ours.

Mr. YOUNG. Thank you, Mr. Cotter, and I appreciate that. That is a good comment. It is the same area, same conditions.

In Mr. Schwaab's testimony, any future scientific review will only be allowed to look at information available to May 10th—I do not understand that—and will not include information, like the most recent Atka mackerel assessment. What do you think of this restriction, Mr. Cotter?

Mr. COTTER. Well, I think that is ridiculous, quite frankly. Any time we have access to new information, we need to incorporate that new information; otherwise, why are we seeking new information? Why do we seek to improve our knowledge base if we are not going to use it?

Mr. YOUNG. Thank you.

Mr. Chairman, I cannot understand the reluctance of not accepting new information. I know Dr. Trites, you know, you made a comment—by the way, I understand you are the expert on sea lions,

and I congratulate you. At least you give some common knowledge on things that can be done and should be done. And I do think they have misinterpreted your report or your information.

Question to Mr. Cotter, any one of you. I may, with the help of the Chairman, ask for an independent review of the Steller sea lion funding. Do you think the marine mammal scientists who already seem to have a bias against fisheries, have used the funding in an unbiased manner? Any one of you? Mr. Cotter, do you want to go first?

Mr. COTTER. Well, I would ask Dr. Trites to speak candidly to that.

Mr. YOUNG. Dr. Trites?

Dr. TRITES. Yeah. I would like to say that there has been a lot of research done, a lot of money was put into this. And a lot of very, very good research has been done by broad group of individuals. So, I do not think we can fault the science per se outside of perhaps saying, why did people not get into the Aleutians sooner.

I think what the problem comes down to in the end is who is interpreting the scientific record. There is a huge amount of information, and unfortunately, I mean, my take from the BiOp is it is almost as though we have not learned anything, and that is so far from the truth. So much has been published. We know so much more today. And if it was not for congressional support, we would literally still be in the forest.

So, we know a lot more. I think really the issue is the interpretation of—

Mr. YOUNG. How would we correct that, because this is what I am asking. NMFS is an agency that has no real qualification for anything, and they are maintaining their brown envelope jobs. How would we do that, independently, or how could that be done?

Dr. TRITES. And this would be just be my opinion—

Mr. YOUNG. It is my opinion, too, but you go ahead.

Dr. TRITES. I think the Agency has some excellent scientists, and some of the leading marine scientists, marine mammal scientists as well. The trouble comes down to who in the end is going to help write these management documents?

I do not think it is a leading scientist. They are not raising their hand to volunteer for this. And I think until there is a system put in place where you ensure that the best scientists help interpret the scientific record as opposed to perhaps, from my impression, it is more like looking for volunteers who will help write these. I think then the system is open to abuse, and perhaps some of the people writing it do not necessarily have the qualification to understand the science that has been done.

Perhaps there should be a better relationship between protecting resources and science, and in particular, not just the science done within the Agency, but also science done by the non-Agency.

Mr. YOUNG. What I am saying, though, they write this thing—Mr. Chairman, if I may.

Mr. HASTINGS. Go right ahead.

Mr. YOUNG. I could take this panel of four here—I do not agree with Dr. Ragen, that is OK, but he has got to be on this side anyway—and probably interpret the science. What you are telling me, the science is not bad in NOAA, it is the people. And I asked the

question, who writes it? So, maybe we ought to have an independent peer board involved in the interpretation of the science, because they cannot interpret themselves, Mr. Chairman. You do not have to answer that, but I would like to think about that anyway.

Mr. HASTINGS. That may be something that we should look at directly. There are a lot of “what ifs” involved in Dr. Trites’ response.

I have no other questions for this panel. Mr. Young, if you would like to ask more, then I will yield to you?

Mr. YOUNG. I want to thank the panel. This is my 40th year on marine mammal and fisheries, and this issue is over actually 20 years old. It started earlier than that. It started with the Endangered Species Act. And we have to straighten it out because if we are going to do these things and give faith back into the government, there has to be accountability. That is why I am interested in the concept of an independent panel. You guys all may be paid a job, you do not know. I will ask for volunteers and see how many do it.

But we have to do something that makes this work, or I would just as soon dis-fund the organization. This is my pet peeve. If you are not doing the job, if you run an agenda without putting all the shareholders in it, we are doing a very poor job. And we as congressmen have the oversight privileges in actually funding these agencies. So, I think that is our job. And if they are not doing it correctly, let them go out and ask with a tin cup.

Mr. HASTINGS. Well, I want to thank the panel very much for your testimony. And as usual—I will not say as usual, but many times questions arise afterwards. If we submit questions to you, if you would respond in a timely way, I would very much appreciate it.

I will dismiss this panel, and at the same time we will call up our third and final panel. We have Mr. Todd Loomis, Government and Industry Affairs with Cascade Fishing, Inc., Mr. Dave Little, President of the Freezer Longline Coalition, Mr. Rudy Tsukada, President of Aleut Enterprise, LLC, and Mr. Michael LeVine, Senior Counsel of Oceana.

Thank you all for joining me. And by now you have heard, if you were sitting through the first two panels, what the ground rules with the timing lights in front of you.

Your entire statement that you have submitted will appear in the record. The entire statement will. And so, I would ask you to, with your oral statements, to keep it confined, if you would, to the five minutes.

And, again, the timing lights, when the green light is on, that means you are doing very, very well. When the yellow light goes on, it means you have one minute, and when the red light goes on, that means that the five minutes have expired.

So, Mr. Loomis, we will recognize you, Government and Industry Affairs with Cascade Fishing. You are recognized for five minutes. Turn on that mic.

**STATEMENT OF TODD LOOMIS, GOVERNMENT AND INDUSTRY  
AFFAIRS, CASCADE FISHING, INC.**

Mr. LOOMIS. Good morning, Mr. Chairman, and thank you for the opportunity to be here today. For the record, my name is Todd Loomis, and I work for Cascade Fishing, a company that catches, processes, and sells frozen seafood. We have been in business since 1988 and are the largest single vessel quota holder of Atka mackerel.

Our company has also been involved in research in the Aleutians for nearly a decade.

We employ 110 individuals, and our payroll will exceed \$4 million this year, but we have been deeply impacted by the Biological Opinion.

I would like to accomplish several things today. I will begin by describing how the closures in the Aleutians are impacting businesses and people, how the BiOp's analysis presented no evidence that fisheries were impacting sea lions. I will provide some examples of how the economic analysis was insufficient, and then I will close with suggestions for how we should proceed from here.

Prior to the closures, each year we fished about 140 days in the Aleutians. Under the closures, we lost about 70 of those days at a cost of just under \$4 million to our crew, vendors, the State of Alaska, and our CDQ partner, APICTA.

NMFS estimated aggregate annual losses of up to 750 jobs and \$83 million, but the closures also impact the U.S. trade balance and exports to countries such as China, Japan, and Korea. Losses in the trade imbalance could be even more dramatic in coming years if the current measures are kept in place.

The North Pacific fisheries are among the best managed in the world, and we are fortunate to be part of the Amendment 80 sector. Amendment 80 ended nearly 20 years of Olympic style derby fishing and allowed us to form harvesting cooperatives. This has resulted in stability for our sector and increased earnings for our crew.

Amendment 80 also brought additional costs and monitoring requirements for our fisheries, but these came with the benefits of being able to very accurately manage and monitor our catch. I am very proud of our company, our industry, and the benefits that we provide to our employees and the Nation, but the BiOp and the fishery closures threaten to derail all of our hard work and progress.

NMFS has put our livelihood at risk by instituting fishery restrictions in an area twice the size of New England and foreclosing on the harvest of over 70 million pounds of mackerel. As you heard this morning from representatives from the State's review panel, their case was anything but rock solid, and there is no established link between fisheries and the Steller sea lion decline.

NMFS built their case around assertions that the Aleutians were an unproductive ecosystem, that a high fraction of the local biomass was being removed, and that sea lions were suffering from nutritional stress. But all of these statements are not true, Mr. Chairman, and the science simply does not support these claims. Both the public and independent scientists challenged NMFS on



many of their assertions, and while much of the information was corrected in the final BiOp, the closures remain.

The North Pacific Council made a herculean effort to review the draft BiOp and take public comment on it. They looked at the available science and made surgical recommendations that would have allowed mackerel fisheries to continue outside the critical habitat in the West and continue inside critical habitat in the Central Aleutians. The Council's motion passed unanimously, but was largely ignored by NMFS in the final BiOp, and they opted instead for sweeping fishery restrictions.

Instead of preparing an environmental analysis for this action, NMFS should have prepared an EIS, which would have provided a more rigorous assessment of the impacts. The EA assumed revenue would be made up by moving to fisheries such as yellow fin and rock sole. Unfortunately, we are mackerel boats, and we earned a large portion of our catch history in the Aleutians. Our larger vessels need more crew and are costlier to operate than flat fish boats.

As such, we do not have the quota portfolio necessary to make a wholesale change from mackerel and cod to flat fish in the Bering Sea. And even if we did, it would not be a one-to-one replacement for the revenue we have lost in the Aleutians.

To state it plainly, Mr. Chairman, the information NMFS had before them simply does not support their findings or the fishery closures they have implemented. NMFS has been reluctant to proceed with a review similar to the one conducted by the States of Alaska and Washington, but I think that type of review is critical to bringing some sanity to this process.

If NMFS will not accept the State's review, then they should conduct their own, but it must be one that is open and transparent, conducted jointly by NMFS and the Council. It should consider all of the scientific information and public comment to date, as well as the conclusions reached in the BiOp.

In a recent meeting between several industry leaders and Dr. Lubchenco, we discussed this very type of review, and I am hopeful that it will be conducted as I have described.

In closing, I would like to recommend that perhaps it is time for a broader scientific review of the sea lion programs. We have spent roughly \$180 million and counting, and we still have many unanswered questions and are lacking crucial data. We need this information to make informed decisions as opposed to precautionary guesses at what needs to be done. Perhaps the National Science Foundation or a similar body should audit this program and prescribe some recommendations as to how we should proceed.

I think this approach is the best way to get some of the basic questions answered so that we may truly understand what is happening with sea lions in the North Pacific.

Thank you.

[The prepared statement of Mr. Loomis follows:]

**Statement of Todd M. Loomis, Government & Industry Affairs,  
Cascade Fishing, Inc.**

Mr. Chairman, thank you for giving me the opportunity to testify on the recent Steller Sea Lion (SSL) biological opinion (BiOp) and the resultant Aleutian Islands fishery closures that were put in place earlier this year. I work for Cascade Fishing,

Inc., a Seattle-based seafood company that has been in business since 1988 and one that is heavily dependent on the Aleutian Islands Atka mackerel and Pacific cod fisheries. Our company owns one catcher/processor and is the largest single-vessel quota holder of Atka mackerel. Our vessel catches, processes, and freezes various species of groundfish and in recent years has operated over 225 days each year in the Bering Sea, Gulf of Alaska, and the Aleutian Islands. Our company is also heavily involved in research and has partnered with NMFS, the University of British Columbia, and the University of Alaska Fairbanks on numerous projects.

I'd like to accomplish several things in my testimony today. First, I want to describe our company so you can see how the unnecessary fishery closures that NMFS has imposed are impacting real businesses and real people. Second, I'd like to touch on the analysis that led to these closures and illustrate how NMFS failed to take into account important information that showed their analysis was flawed and that there is no evidence these closures will promote SSL recovery. And finally, I'd like to give you some examples of how the economic analysis (EA) that was prepared was insufficient for this highly controversial action. I'll close with several suggestions for a way forward including the idea of a high level scientific audit of NMFS' SSL scientific programs.

Prior to the BiOp and implementation of the fishery closures, our vessel annually fished approximately 140 days in the Aleutian Islands targeting mackerel and cod. This year, under the new fishery closures, we lost about 70 fishing days in the central and western Aleutians. We estimate these lost days came at a cost of just under \$4 million to our crew and vendors and we are just one of the affected companies. The combined loss for all participants in the Aleutian Islands fisheries was estimated by NMFS to be up to 750 jobs and over \$83 million in lost annual earnings. There are seven catcher processors and several catcher vessels that participate in the mackerel fishery and all have been similarly impacted by the fishery closures NMFS has imposed. We expect losses to be even bigger over the next few years if NMFS continues the measures that are now in place.

As a seafood company, we produce high-quality all natural, affordable frozen food that we believe is one of the best protein sources in the world. We are also exporters, with most of our product going overseas to China, Japan and Korea, a plus for the U.S. trade balance. And most importantly, we create and sustain jobs during these uncertain economic times. Our company employs 110 people and our payroll will exceed \$4 million this year.

The North Pacific fisheries are among the best managed in the world. We have a healthy resource, conservative management by the North Pacific Fishery Management Council (Council), and we are part of a catch share program created by Amendment 80 (A80) to the Fishery Management Plan for the Bering Sea and Aleutian Islands. A80 ended nearly 20 years of Olympic-style derby fishing for our sector and empowered us to form harvesting cooperatives. We have taken full advantage of this opportunity and have fished as a member of a cooperative since the program's inception in 2008. A80 has resulted in stability to our sector and increased annual pay for our crew by enabling us to operate more efficiently. While A80 brought additional costs and monitoring requirements it has resulted in improved management and conservation measures for our fisheries. We now carry two fisheries observers at all times, have electronic monitoring of our catch and fishing locations, use motion-compensated scales to weigh all catch, and every haul is sampled by an observer. All of these tools and technologies have enabled us to very accurately manage and monitor our catch such that we can manage harvest very precisely. We are very proud of our company, the industry we work in, the accomplishments we've made, and the benefits we provide to both our employees and the Nation. The BiOp and the fishery closures, however, threaten to derail all of our hard work and efforts.

To put this at risk, NMFS surely must have had strong evidence and scientific proof that fisheries were causing jeopardy and adverse modification for SSL before closing or restricting fisheries in 145,000 square miles of ocean (that's more than twice the size of New England or roughly the size of the Dakotas) and causing over 32,000 mt (70 million lbs.) of mackerel to become unavailable for harvest and sale? Unfortunately, if you review the BiOp, I think you'll come to the same conclusion that the States of Washington and Alaska came to in their recent review of the BiOp—the information that NMFS had before them does not support a jeopardy or adverse modification finding and there is no established scientific link between fisheries and the SSL decline or recovery. Also recall that, as a whole, the western distinct population segment (DPS) of SSL has increased in numbers over the past decade to the point that they may be on track for downlisting. With this BiOp however, NMFS has chosen to manage SSL for recovery in sub-units smaller than the DPS,

which we believe is not consistent with the letter or spirit of the Endangered Species Act.

To put it plainly Mr. Chairman, what you have is an agency that is taking what it deems are 'precautionary measures' that will likely have no impact on the status of SSL, but they are having a profound negative impact on the commercial fishing industry, support services, and communities. Much of the work that the public and the Council have done to participate in the process has fallen on deaf ears. Critiques of the analysis by independent scientists were dismissed and the work of the Council to develop more practical measures designed to meet NMFS criteria were ignored. To date, responses from NMFS have not been received by anyone that took the time to review and submit comments on the draft BiOp and the interim final rule and that is not acceptable. The process that NMFS has undertaken has been driven by an artificial timeline and a pre-conceived notion that the problem is fisheries in spite of the fact that no scientific link to fisheries has been established. NMFS has not responded to public comments as is common practice with Federal actions of this nature and in my opinion, did not allow for adequate external review of the BiOp (including its conclusions and mitigation measures) prior to its release.

I think you'll also find that many of the statements that NMFS made in the draft BiOp and then later corrected based on public input (e.g., the Aleutians are an unproductive ecosystem) should have resulted in different conclusions or persuaded NMFS to modify the fishery closures they originally proposed. For example, NMFS' original assertion in the draft BiOp that fisheries were removing a high fraction of the local biomass of mackerel was turned on its head when challenged in public comments. In reality, the fishery in the western Aleutians was shown to have a relatively low harvest rate—a rate that was even lower than other areas of the Aleutians where the SSL population is more stable. There are several other examples of areas where NMFS' draft BiOp reached to make a case that fishing was affecting SSL and each of their arguments fell apart in the face of comments and information brought forward by outside scientists and the public. In some cases NMFS did modify the final BiOp to correct their mistakes, but they failed to measurably change their conclusions and resulting fishery closures. One would think that NMFS would have reconsidered the closures and the possibility that nutritional stress wasn't to blame, but they just rolled on as if the closures were a pre-ordained outcome that couldn't be modified because they were too far down the road.

In my view, NMFS has become entrenched in their nutritional stress hypotheses and cannot seem to find a way to believe that perhaps something else caused the decline or is preventing recovery. I find this very frustrating in light of the fact that 13 of 14 nutritional stress indicators that have been studied show that nutritional stress is not present in SSL. I remain hopeful, Mr. Chairman, that you and your committee can bring some sanity to this process—a process that has, without good cause, closed fisheries upon which my company's livelihood depends.

What is particularly appalling is the total disregard NMFS had for the efforts put forth by the Council who worked under an extremely tight timeline to address a serious management issue. In my opinion, the Council did an admirable job given the schedule set by NMFS. The Council took the time and made the effort to digest the huge amount of information that NMFS made available when it released the draft BiOp on August 2, 2010. The Council and public had a mere two weeks to review nearly a thousand pages of materials and provide substantive comments during a special Council session that was held August 16—20, 2010. It was made clear that this would be the only opportunity to comment as there would be no time for the Council to make adjustments to the proposed fishery closures at their regularly scheduled October 2010 meeting.

While no small task, the Council deliberated and unanimously passed a motion that recommended NMFS consider less restrictive mackerel fishery closures in the western and central Aleutians. The Council's motion was crafted to meet SSL forage needs while preserving as much of the commercial fishery as possible. To do so the Council relied heavily upon the available scientific information to propose measures that allowed fishing outside of critical habitat in the western Aleutians and a geographically spread out fishery inside critical habitat in the central Aleutians. The Council also relied on appropriate science to allow fishing in a limited portion of SSL critical habitat where research had shown relatively low commercial harvest rates of mackerel and protected areas where it appeared harvest rates of the local biomass were larger than they thought prudent given the status of SSL. In most cases the Council's alternative used science that NMFS itself had done (Alaska Fisheries Science Center has done ongoing studies to examine local biomass and harvest rates in areas adjacent to SSL sites). Unfortunately, NMFS largely ignored the Council's motion in the final BiOp and instead of using science to make surgical

changes to the fisheries they made sweeping changes and largely ignored the Council's recommendations and the most relevant scientific studies.

I'd also like to point out that the EA that NMFS prepared for this action was woefully deficient. The agency should have completed an Environmental Impact Statement (EIS) because the proposed major Federal action has clearly significantly affected the quality of the human environment (i.e., had a significant economic impact). An EIS is what was prepared during an evaluation of SSL conservation measures in the early 2000's. Given the significance of the proposed action and the clear economic impacts, NMFS should have prepared an EIS, which would have provided a more robust and rigorous assessment of the proposed action and its impacts.

When we got locked out of the mackerel fishery it was assumed in the EA that we would simply move to other fisheries to make up the lost revenue. The EA hypothesized that we could make up the estimated 10 weeks of lost fishing time in the Aleutians by moving into the rock sole fishery for 3 weeks and yellowfin sole for the remaining 7 weeks. While a nice idea, it isn't that simple Mr. Chairman. The EA correctly points out the size difference between mackerel boats and flatfish boats—our boats are larger, we have more crew, and they are costlier to operate. We also earned a different quota portfolio because of the fisheries we historically participated in. Without sufficient prohibited species and other necessary quota allowances, expansion into the more multi-species target fisheries such as flatfish is nearly impossible. If it were profitable for us to target rock sole and yellowfin sole instead of mackerel we would have done so years ago, but that is not the case and we do not have the flexibility to change. I'm also quite certain that other members of our cooperative do not want us crowding them out of their traditional fishing grounds when we should be fishing mackerel and cod in the Aleutians.

As a final point, Mr. Chairman, I would like to call the Committee's attention to some recent developments that may point to a way forward, at least in part. In August, several industry leaders had a meeting with Dr. Lubchenko, head of NOAA. In that meeting we discussed NMFS plans for a scientific evaluation of the BiOp by the Center for Independent Experts (CIE). We believe that NMFS is pursuing a CIE review partly as a response to the scientific review recently completed by the States of Washington and Alaska. Unfortunately, the CIE process is not an open process like the one the States used, and NMFS has up to now repeatedly refused to include the North Pacific Fishery Management Council in the design and implementation of any review of the SSL BiOp despite clear guidance in the Magnuson-Stevens Act (MSA) that such peer reviews should be jointly conducted by NMFS and the Council.

At the August meeting, Dr. Lubchenko agreed that the CIE review should be transparent, and that the Council should be involved in its design and implementation. At the Council's October meeting, they accepted this apparent change of heart, adopted terms of reference for the CIE review, and appointed a workgroup to work with NMFS to finalize the process for review of the BiOp. We support this effort, and hope the Committee will monitor this process as it unfolds. It is imperative that any further review be conducted in as open and transparent a manner as that employed by the States, and that all of the scientific information regarding SSLs be evaluated as well as NMFS conclusions. Following such an evaluation, there should be a complete review of the fishery restrictions and revisions to them as appropriate. This should be done through the MSA process, with full participation by the Council, and not behind closed doors with artificial timelines as was done with the current BiOp and fishery closures.

We also believe that it is time for a broader review of NMFS scientific program for SSLs. Over the past decade or so, the United States has spent roughly \$180 million to better understand the factors affecting SSL recovery. Yet, when it comes time to make decisions regarding our fisheries, crucial data are lacking and we are left with these "precautionary measures". Perhaps the National Science Foundation or a similar high level scientific organization should audit this program and make recommendations on how we can better use taxpayer funds to get at the basic scientific questions about SSL population status and factors affecting them.

In conclusion Mr. Chairman, I'd like to ask this committee to embark on a mission to rein in NMFS and the broad latitude they have displayed during the development of this BiOp to interpret the science as they see fit and to eliminate economic activity under the guise of being precautionary. Our company supports science and the use of science in the decision making process, but we cannot support what has been done here. If fisheries had been clearly implicated in the SSL issue we would accept the need for fishery restrictions and adjust to the necessary changes. But lacking that scientific proof and having NMFS simply guessing at what needs to be done is not acceptable. NMFS is supposed to be our Nation's premier scientific agency, but this reckless disregard for science and the law is untenable. In our current eco-

conomic situation our government should not be undertaking this type of devastating action.

Mr. HASTINGS. Mr. Loomis, thank you very much for your testimony.

Next, we will go to Mr. Dave Little, who is President of the Freezer Longline Coalition. You are recognized for five minutes, Mr. Little.

**STATEMENT OF DAVID LITTLE, PRESIDENT,  
FREEZER LONGLINE COALITION**

Mr. LITTLE. Thank you, Chairman Hastings, Congressman Young. My name is David Little. I am here today to testify as the President of the Freezer Longline Coalition. I am also the President of Clipper Seafoods.

The Freezer Longline Coalition would like to thank the Committee on Natural Resources for holding this oversight hearing. I believe it is particularly important for Congress to address the questions of whether the science contained in the Steller sea lion Biological Opinion supports the decisions by NMFS to move forward with an interim final rule that imposes vast closures on the Aleutian Islands, Pacific cod, and Atka mackerel fisheries.

The Aleutian Islands cod fishery is important for the Freezer Longline fleet. Many vessels in our fleet have specialized in the high value fish that are caught in this area. For some members, this makes up 50 percent of their revenues.

As the interim final rule is still in its first year, the full effect of the rule are not yet well known. However, the anticipated economic impacts in the BiOp state that the losses could be as high as 44 percent of gross revenue.

The loss of valuable Aleutian Islands cod will have long-term unrecoverable damages to the Freezer Longline fleet.

This Committee has asked, does the science support the decision? No, Mr. Chairman, it does not. The NMFS Biological Opinion was not reviewed by any independent scientific panels, despite NMFS' public statements that it would undergo such a review. In fact, the only peer reviewed analysis was recently conducted, as you heard this morning, by scientists commissioned by Washington and Alaska States.

This review panel found, and we concur, that the determination of jeopardy by National Marine Fisheries Service is not supported by the best available science.

It is unbelievable to us that the scientific underpinnings of the BiOp and the RPAs were never peer reviewed, even though thousands of pages of public testimony directly criticized the science. This is about bad science costing jobs and driving well-managed, sustainable fisheries out of business. The fishing fleet has been forced into litigation because the Agency has made an irresponsible decision that, if allowed to stand, will set a new legal precedent.

The Agency cannot be allowed to unlawfully regulate sustainable American fisheries based upon bad science to support a political agenda of a select few.

The single basis for the National Marine Fisheries Service's jeopardy and adverse modification determination is the hypothesis that

fisheries compete with Steller sea lions for food. This is otherwise known as the nutritional stress theory. The Agency's stated position is that it does not know whether nutritional stress is even occurring, and even if the evidence showed that nutritional stress is occurring, NMFS does not know whether the fisheries are the cause of such stress.

As acknowledged by the Agency, the Biological Opinion findings and supporting information are equivocal at best.

NMFS's hypothesis that fisheries affect Steller sea lions is contradicted by current studies that were ignored. A study mandated and funded by Congress, Calkins 2008, found that there is no correlation between the Freezer Longline cod fishery and Steller sea lion population dynamics. Unfortunately, this study receives essentially no attention in the Agency's Biological Opinion.

Throughout the BiOp, the Agency ignored good science for no other reason than science did not support the Agency's preconceived conclusions.

Mr. Chairman, given the best scientific information available, there is little factual basis to support the restrictions on the fisheries. The scientific record does not support NMFS' findings of jeopardy and adverse modification. Those findings are flawed for several reasons. One, they are based only a small subsection of the Western DPS, and not the Western DPS as a whole. They are based on the Agency's assessment of whether the DPS is meeting recovery criteria and not ESA Section 7 standards. They are unsupported by any determination that fisheries cause jeopardy in adverse modification, and they are not consistent with the best available science.

The BiOp focuses upon a foregone conclusion that is built largely on advocacy rather than science. The authors of the BiOp make selected use of data and scientific papers to support their conclusion, while at the same time, ignoring or dismissing any data that might not support the adopted position.

Thank you again for the Committee's time and resources and the opportunity to speak on behalf of the Freezer Longline Coalition. That concludes my comments.

[The prepared statement of Mr. Little follows:]

**Statement of David Little, President, Freezer Longline Coalition**

Good afternoon Chairman Hastings, Congressman Young and other Members of the Committee,

My name is David Little, I am here today testifying as the President of the Freezer Longline Coalition. I am also the founder and President of Clipper Seafoods, Ltd. I have served as a member of the North Pacific Fishery Management Council's Steller Sea Lion Mitigation Committee as well as a member of the Council's Advisory Panel and have been involved for more than 15 years in following Steller sea lion science.

The Freezer Longline Coalition would like to thank the Committee on Natural Resources for holding this oversight hearing and especially for this opportunity to provide comments on NOAA's Steller sea lion science and fishery management restrictions. I believe it is particularly important for Congress to address the question of whether the science contained in the Steller Sea-Lion Biological Opinion supports the decisions by NMFS to move forward with an "interim" final rule and impose vast closures on the Aleutian Islands Pacific cod and Atka mackerel fisheries.

The Freezer Longline Coalition represents a Washington and Alaska based fleet that participates in the Aleutian Islands Pacific cod longline fishery. The Aleutian Islands cod fishery is important for the freezer-longline fleet as a whole, as well as for individual vessels; many vessels in our fleet have specialized in the high value

fish that are caught in these areas. For some members, up to 50% of their revenues have come from Aleutian Islands cod. Because the interim final rule is still in the first year of its implementation, the full financial effects of the rule are not yet well known. However, the anticipated economic impacts of the rule, as evaluated by NMFS in the BiOp state that resulting losses could be as high as 44% of gross revenue. Certainly the loss of access for valuable Aleutian Islands cod will have long-term, unrecoverable damages to the freezer longline fleet.

This Committee has asked: Does the Science Support the Decisions? **No, Mr. Chairman, it does not.** My testimony and documents we have submitted for the record show how NMFS has used incomplete and misleading science to impose sweeping and unnecessary restrictions on the Freezer longline fleet.

Mr. Chairman, NMFS's biological opinion supporting the interim final rule was not reviewed by *any* independent science panels or independent individual experts before the rule's implementation, despite NMFS's public statements that it would undergo such a review. In fact, the *only* peer reviewed analysis of the science supporting NMFS's decision was recently conducted by a panel of well-established scientists commissioned by the states of Washington and Alaska. This review panel found, and we concur, "*That the determination of jeopardy by NMFS is not supported by the best available science.*"

It is unbelievable to us that the scientific underpinnings of the BiOp and RPA's were never peer reviewed, even though thousands of pages of testimony were received by the agency much of it questioning and directly criticizing the science. This is about bad science, costing jobs and driving well-managed sustainable fisheries out of business. The freezer longline fleet has been forced into litigation because the agency has made an irresponsible decision that if allowed to stand, will set a new legal precedent in a very fundamental respect. We have also challenged the rule because we cannot idly sit by while the agency proposes to unreasonably and unlawfully regulate sustainable American fisheries based upon bad science to support the political agenda of a select few.

As to the content of the biological opinion, the single basis for NMFS's "jeopardy and adverse modification" determination is the agency's hypothesis that fisheries compete with Steller sea lions for food, otherwise known as the "nutritional stress theory." However, the agency's stated position in the biological opinion is that it "does not know" whether nutritional stress is even occurring in the sea lion population. And, even if the evidence showed that nutritional stress is occurring, NMFS states in the biological opinion that it does not know whether the fisheries are the cause of any such stress. As acknowledged by the agency the biological opinion's findings and supporting information are at best "*equivocal*". Good science and the legal requirements of the ESA do not permit the imposition of highly burdensome regulations based on this type of speculation.

NMFS's statement that it does not have sufficient evidence to determine whether fisheries affect Steller sea lions is contradicted by current studies that were ignored by the agency. As an example, a study mandated and specifically funded by Congress, (Calkins 2008), found that there is *no correlation* between the freezer-longline cod fishery and Steller sea lion population dynamics. Unfortunately this study receives essentially no attention in the agency's biological opinion *and* this is just one case. Throughout the BiOp the agency ignored good science for no other reason than the science did not support the agency's preconceived conclusion.

Additionally, the agency's conclusion that the entire Steller sea lion Western Distinct Population Segment (WDPS) is "jeopardized" is not consistent with the fact that the WDPS as a whole is experiencing a robust increase in abundance. In fact, again according to NMFS, the pup count in the WDPS has increased 14% (from 2001-02 to 2009) and the non-pup trend site count has increased 12% (from 2000-2008). The NMFS population estimate of the WDPS as of 2009 is greater than 75,000 with 50,040 in the U.S. portion. Other estimates used in the past such as (Trites and Larkin 1996) suggest a population of 56,712 for the U.S. portion in 2009. For reference, the ESA *downlisting* criteria for the U.S. portion is 53,100 by 2015. We do not understand how a DPS that is increasing in abundance, and is indisputably in better condition than it was a decade ago, can also be said to be "jeopardized" by a single action that has been occurring over the course of the same decade. Indeed, there is no legal or scientific support for such a conclusion. The agency's decision is not consistent with the evidence and its conclusions are illogical, arbitrary, and unreasoned.

Mr. Chairman, given the best scientific information available, there is little factual basis to support the restrictions on the fisheries in the Aleutian Islands. More generally, the scientific record does not support NMFS's findings of jeopardy and adverse modification, as set forth in the 2010 BiOp. Those findings are flawed because, among other things:

- they are based only on a small subsection of the WDPS and not the WDPS as a whole;
- they are based on the agency's assessment of whether the DPS is meeting recovery criteria, and not ESA's Section 7 standards;
- they are unsupported by *any* determination that any fisheries *cause* "jeopardy and adverse modification"; and
- they are not consistent with the best available science and were made without consideration of scientific data and information that are directly relevant to the issues addressed in the BiOp.

The BIOP failed to present a careful analysis of all relevant factors and information and then failed to arrive at a reasoned conclusion that is supported by factual evidence. The BiOp focuses upon a foregone conclusion that is built largely on advocacy rather than science. The authors of BiOp then make selective use of data and scientific papers to support their conclusion while at the same time ignoring or dismissing any data that might not support the adopted position.

In closing I would like to quote Dr. Ian Boyd, a leading marine mammal researcher. *"The document lacks a rigorous approach to the assessment of 'evidence' and fails to use evidence consistently; information that has much associated uncertainty when first introduced in the analysis gradually drifts to information of high certainty as the document develops"* Dr. Boyd continues *"one should not condone the twisting of data to achieve what is, in essence, a political objective."* This view was echoed by the North Pacific Fishery Management Council's Scientific and Statistical Committee, which concluded upon review of the draft biological opinion that *". . . the conclusion chapter has retained some tone of advocacy, stating in fact as some conclusions that still have a great deal of uncertainty about them."*

Thank you again for the Committee's time and resources and the opportunity to speak on behalf of the FLC.

The Freezer Longline Coalition submitted for the record the following documents:

- 1.) Comments on SSL 2010 Biological Opinion submitted to the Scientific Review Panel, June 2, 2011. These comments also contain public comments to date submitted by the FLC to NMFS on the draft and final BIOP.
- 2.) Comments on SSL 2010 Biological Opinion submitted by the to the Scientific Review Panel, August 22, 2011
- 3.) State of Washington and Alaska Scientific Review Panel, final report
- 4.) Legal filings Freezer Longline Coalition v. Lubchenco et al.

Mr. HASTINGS. Thank you very much, Mr. Little.

And next, we will call on Mr. Rudy Tsukada, President of Aleut Enterprise, LLC. Mr. Tsukada, you are recognized.

**STATEMENT OF RUDY TSUKADA, PRESIDENT,  
ALEUT ENTERPRISE, LLC**

Mr. TSUKADA. Good morning, Mr. Chairman, Congressman Young. My name is Rudy Tsukada appearing on behalf of Aleut Enterprise, LLC, a wholly owned subsidiary of the Aleut Corporation, and we operate a non-8A fuel distribution business of Adak Island.

The Aleut Corporation was created pursuant to Alaska Native Claim Settlement Act to represent the native people of the Aleutian region by promoting economic development and social welfare, and preserving their traditional ways of life. Our shareholders are native Aleuts, their families, and their descendants.

I am here today because I believe the National Marine Fisheries' groundfish restrictions have severely undermined any possibility of economic development on Adak Island, and directly impacts the welfare of the Aleut people.

Adak Island sits on the Western edge of the Aleutian Islands, 1,300 miles southwest of Anchorage. The island is the 25th largest in the United States, and according to the U.S. Census Bureau, is currently home to 300 residents.



Nine thousand years ago, the Aleuts became the first inhabitants of Adak Island. They hunted whales, seals, otters, sea lions, and island birds, and fished in Adak's rich waters. There is no better or stronger or more caring constituency than my shareholders. They are not just sitting there dreaming about sea lions; they actively utilize them, co-inhabit with them. They are part of their culture.

In 1998, the Aleut Corporation acquired Adak and its facilities in a land exchange with the U.S. Navy and the Department of the Interior. In return for Adak, the Navy and Interior Department received other lands held by the Aleut Corporation elsewhere on the Aleutian Islands. We thought this was a good deal. We wanted to make something happen to Adak and to grow it.

Therefore, the Aleut Corporation invested large monies into companies like mine, Aleut Enterprise, to promote economic development and to try to create businesses in these far flung regions in Western Alaska.

The NMFS fisheries and restrictions on the Aleutian Islands is a severe concern to us. Much of my testimony written has already been repeated, so I will go ahead and try to emphasize some of the other aspects.

The decline that we saw in the first quarter of this year was more than a 50 percent decline in my fuel sales. This was 100 percent related to the restrictions imposed by these regulations—unfounded regulations. What is the impact of that? Congressman Young, you understand the importance of heating fuel prices in Alaska. In Adak, because of the fisheries, we can sell heating fuel for \$4.49. Those were the June, 2011 prices per gallon. Because of these restrictions and lower volumes, what you will now see is us pricing fuel in volumes similar to our neighbors. Our closest neighbor is Atka and St. George. Atka at the time was paying \$7.43 per gallon for heating oil, St. George, \$6.34. This is not just a matter of lost opportunity, but it is a matter of ability to heat homes.

Realizing these impacts of the NMFS' rules that we believe violates Magnuson-Stevens, NEPA. It goes directly contrary to the Environmental Justice Proclamation by this current Administration. We had to something to ensure that this would not happen to our shareholders.

Several hundred years ago, the Russians came in and enslaved the Aleut people. That was a tragedy. World War II, both the Japanese and the U.S. Government sent my shareholders to intern camps, a forced relocation. This is no different. This is something that is completely avoidable, makes absolutely no sense, and is certainly not justified by science. But the impacts are being felt already, and will be felt further on.

My previous job was with the Quinault Nation's Enterprise Board in Taholah, Washington. While I was not a part of that discussion of the marbled murrelet and the owls, I did see what the impacts were. I will not allow that to happen within any of the powers that I have while I work for Aleut Enterprise.

When you look at the graphs, I can show you another graph, a graph that shows the number of shareholders in region. It looks very much like the Steller sea lion graphs. How can I go back to my shareholders and tell them that not only are they second class

citizens once again, they are now being placed underneath the Steller sea lion, animals that they care about, that they need, that they interact with?

And with my time up, I will end my testimony there.  
[The prepared statement of Mr. Tsukada follows:]

**Statement of Ryuichi Rudy Tsukada, President, Aleut Enterprise, LLC**

Good morning, Mr. Chairman. My name is Rudy Tsukada, appearing on behalf of Aleut Enterprise, LLC, a wholly-owned subsidiary of the Aleut Corporation that operates a fuel distribution business on Adak Island. The Aleut Corporation was created pursuant to the Alaska Native Claims Settlement Act ("ANCSA") to represent the Native people of the Aleutian region of Alaska by promoting their economic and social welfare and preserving their traditional ways of life. Its shareholders are Native Aleuts, their families, and descendants. National Marine Fisheries Service (NMFS) groundfish restrictions have severely undermined the economic development of Adak Island and the welfare of the Aleut people.

Adak Island sits on the western edge of the Aleutian Islands in Alaska, 1300 miles (a three-hour jet ride) southwest of Anchorage. The island, the 25th-largest in the United States, is currently home to over 300 residents, all of whom live in the City of Adak. Nine-thousand years ago, the Aleuts became the first inhabitants of Adak Island. They hunted whales, seals, otters, sea lions, and island birds and fished Adak's freshwater streams and surrounding seas. Adak was later settled by the Russians and eventually purchased by the United States. In the early 1940s, Adak Island became the site of a military base operation by the Army Air Corps for offensive action against Japanese military forces occupying the Aleutian Islands of Attu and Kiska. By the spring of 1944, an estimated 90,000 military personnel lived on Adak Island, preparing for strikes against Axis forces in the Pacific arena. After World War II, Adak continued to serve as a naval air station during the Cold War, but its population slowly dwindled over the years. The naval station formally closed in March 1997, and the EPA began performing cleanup of the site, which had been polluted by hazardous substances and explosives.

In 1998, the Aleut Corporation acquired Adak and its facilities in a land exchange agreement with the U.S. Navy and Department of the Interior. In return for Adak, the Navy and Interior Department received other lands held by the Aleut Corporation elsewhere in the Aleutian Islands. The Aleut Corporation pursued the exchange in part because the island historically had been the location of an early Aleut community and in part because it saw value in the island's existing facilities. Since the Aleut Corporation acquired the land, numerous families have relocated to Adak. The Aleut Corporation has taken a very active role in the development of the city of Adak, taking action to bring new business to the community. For example, it formed Aleut Enterprise, LLC to encourage commerce on the island. Aleut Enterprise owns a Seafood processing facility on the island that processes Pacific cod, Atka mackerel, halibut, and other Bering Sea groundfish. Another of Aleut Enterprise's primary businesses in Adak is refueling marine vessels, many of which are fishing boats. In order to further promote economic development on Adak, in 2004, Congress granted the Aleut Corporation the exclusive right to the non-Community Development Quota (non-CDQ) directed otlock fishery in the Aleutian Islands Subarea of the Bering Sea-Aleutian Islands Management Area. The Aleuts have the right to assign their harvest rights to others within the Aleutian Island Subarea.

NMFS fisheries restrictions in the Aleutian Islands related to concerns regarding Stellar sea lion populations threaten to destroy Adak's economy and the well-being of its people. In November of 2010, NMFS published its long-delayed biological opinion, or BiOp, on Stellar sea lions. Based on conclusions made in the BiOp, NMFS published an Interim Final Rule on December 13, 2010 that restricted fishing for Pacific cod and Atka mackerel in Management Areas 541, 542, and 543 of the western Aleutian Islands. These restrictions included broad fishing prohibitions in areas near suspected sea lion rookeries, including many areas directly offshore of the Aleutian Islands.

In the BiOp, NMFS concluded that two of the seven subregions within the western distinct population segment (DPS) of Stellar sea lions were not meeting recovery goals and suggested nutritional stress as the cause. The fact is, however, that science does not back up this assertion. First, the western distinct population segment of Stellar sea lions has *increased* in abundance over the past decade. According to NMFS, pup production across the western distinct population segment has increased 14 percent and non-pup production has increased 12 to 16 percent. Second, the available data does not support NMFS' claim that sea lions aren't getting

enough to eat. Of fourteen indicators of nutritional stress, NMFS identified reduced natality as the *sole* indicator to support its theory that chronic nutritional stress has caused Steller sea lion declines in the western Aleutian islands. The other thirteen indicators suggested that western distinct population sea lions were *not* nutritionally stressed. Furthermore, NMFS found that available groundfish forage inside critical habitat was actually *higher* in the western Aleutian Islands, where NMFS restricted fishing, than elsewhere, such as the Bering Sea and Gulf of Alaska. The NMFS conclusion that sea lions are under nutritional stress is contrary to the scientific evidence.

NMFS even questioned its science. In a November 2010 memorandum to NMFS' Assistant Administrator for Fisheries, NMFS Alaska Region Administrator Jim Balsiger identified that: "The controversy around this action centers on the lack of unequivocal evidence that groundfish fisheries impact Steller sea lions. Failure to implement fishery restrictions similar to the reasonable and prudent alternative in the biological opinion is likely to result in litigation by environmental organizations." Dr. Balsiger *admitted* that NMFS hastily forced unfounded, ideologically-based fisheries restrictions down the throats of rural Alaskans. Despite these facts, NMFS decided to completely shut down fishing for Pacific cod and Atka mackerel in Management Area 543—an area about half the size of Texas—in the Aleutian Islands. NMFS also instated other, somewhat more limited closures, in central Aleutian Islands management areas 541 and 542.

Realizing that the disastrous impacts of the NFMS rule—which violates the Magnuson-Stevens Fishery Conservation Act (MSA), the National Environmental Policy Act (NEPA), the Administrative Procedures Act (APA) and the Endangered Species Act (ESA)—the State of Alaska filed a lawsuit in U.S. District Court the next day against now-departed Department of Commerce Secretary Gary Locke, National Oceanic and Atmospheric Administration (NOAA) Director Jane Lubchenco, and NMFS Alaska Region. Alaska Governor Sean Parnell said that "The agency's conclusion that additional fishing restrictions are necessary is not supported by the best available scientific information. The drastic measures proposed by NMFS are simply not necessary given the overall health of the Stellar sea lion population. This decision will have immediate and significant impacts on local communities and fishermen in the area." The Aleut Corporation joined the lawsuit as *amicus curiae* because NMFS' restrictions on the fishing industry in the Aleutian Islands have severe negative impacts on the Aleut Corporation, its Native shareholders, and their communities, particularly the community of Adak. The NMFS restrictions harm Adak's economy, interfere with Aleuts' connection to their natural environment, and undermine the ability of the Aleut Corporation to pass the intended benefits of its pollock allocation along to the Aleut people.

NMFS' restrictions will greatly shrink Adak's economy, which relies heavily on a vibrant fishing industry. Fishing vessels regularly visit Adak to purchase fuel, provisions, food, lodging, and other goods and services. The fisheries closures severely threaten Adak businesses, many of which are subsidiaries of the Aleut Corporation. Numerous fish processing facilities, including Aleut Enterprise subsidiary Aleut Fisheries, LLC, are a critical part of the Adak economy, providing jobs to the Aleut Community in and near Adak. Commercial fishing vessels that target Atka mackerel and Pacific cod account for the majority of Aleut Enterprise's total fuel sales. Based on my experience as the President of Aleut Enterprise, I believe that marine fuel sales in Adak are likely to drop by over 50 percent as a result of NMFS fisheries closures and restrictions. Furthermore, the fishing restrictions will result in a sharp decline in tax revenues to support Adak. Local taxes paid by Aleut Corporation companies comprise nearly two-thirds of the City of Adak's revenue base. The loss of business and subsequent loss of tax revenue will severely cripple the City's ability to provide municipal services to an already underserved community.

In addition to harming Adak's economy, NFMS fishing restrictions adversely impact Native Aleut culture. The Aleuts have traditionally been very closely tied to their environment, including oceans, fisheries, and marine mammals. They have traditionally fished in the waters now classified as "Management Areas 541, 542, and 543" for thousands of years. Bureaucratic fishing restrictions in these areas sever the Native Aleuts' connection to their natural environment.

NMFS restrictions on harvesting Pacific cod and Atka mackerel also undermine the ability of the Aleut Corporation, its Native shareholders, and the city of Adak to realize the economic benefit of its statutorily directed Aleutian Islands Subarea pollock allocation. The restrictions make it extremely impractical for vessels to fish for pollock in the Aleutian Islands Subarea. It is financially impossible for fishermen to fish for pollock in the Aleutians when fishing restrictions have closed access to the very locations inhabited by those pollock.

This spring, realizing that the Aleut Corporation was not going to harvest its statutorily directed 2011 pollock allocation in the Aleutian Islands Subarea, NMFS reallocated the majority of the allocation to the Bering Sea Subarea. NMFS reallocated it to parties other than the Aleut Corporation, without providing any compensation to the Aleut Corporation for the value of the resource it was unilaterally taking away. Because NMFS fishing restrictions make it difficult, if not impossible, for the Aleut Corporation or their designees to harvest the Aleut Corporation's pollock allocation within the Aleutian Islands Subarea, the Aleut Corporation and its Native shareholders will continue to be unable to reap the benefits of its pollock allocation. In the future, when NMFS restrictions prevent the Aleut Corporation or its designees from harvesting the Aleut Corporation's pollock allocation, NMFS is likely to reallocate the Aleut Corporation's pollock allocation outside the Aleutian Islands Subarea and away from its intended beneficiaries. This will continue to prevent the Aleut Corporation and its Native shareholders to realize the benefits of its pollock allocation.

Hopefully, the unfounded fisheries restrictions in Management Areas 541, 542, and 543 of the Aleutian Islands will be reversed. While the lawsuit against the Commerce Department, NOAA and NMFS plays out, the Aleut Corporation asks the Committee to consider a provision that would allow the voluntary transfer of the Aleut Corporation's pollock allocation outside areas affected by the NMFS fisheries restrictions. This option already exists for Community Development Quota (CDQ) groups. According to existing law (16 U.S.C. § 1855(i)(C)), CDQs may be reassigned or reallocated to another management area or subarea through a voluntary transfer. The option to voluntarily transfer its pollock allocation outside the Aleutian Islands subarea would allow the Aleut Corporation and its shareholders, many of whom live on Adak Island, to realize the benefit from its pollock allocation. This would be a small consolation for the Aleut people, whose economy and connection to the environment have been devastated by unnecessary government restrictions.

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Mr. HASTINGS. Thank you very much, Mr. Tsukada.

And our last witness on this panel is Mr. Michael LeVine, Pacific Senior Counsel with Oceana. You are recognized for five minutes.

**STATEMENT OF MICHAEL LeVINE,  
PACIFIC SENIOR COUNSEL, OCEANA**

Mr. LeVINE. Thank you, Chairman Hastings and Representative Young. Thank you for the opportunity to present testimony today.

Oceana is an international non-profit organization dedicated to using science, law, and policy to protect and restore our oceans.

Our Pacific work is headquartered in Juneau, Alaska, and I along with nine colleagues live and work there.

Mr. Chairman, we all depend on healthy oceans, and in Alaska perhaps more than other places, ocean ecosystems are central to our economic and cultural well-being. Healthy ocean ecosystems include long-term sustainable fisheries that provide jobs and support communities.

The conversation we are having here today is about how best to achieve that shared goal. We are having that conversation in the context of the Endangered Species Act because our management choices have pushed us up against that backstop.

The ongoing decline and failure to recover of the Western population of Steller sea lion has forced us to reconsider fisheries' management decisions under very specific conditions. Our shared goal should be to move out of this box, to listen to the story being told by the Western population, and to work together to ensure healthy ocean ecosystems, including sustainable fisheries and vibrant communities.

To that end, I hope to leave you today with three main points. First, the basic scientific information is clear. The Western popu-

lation of Steller sea lion is not meeting recovery goals and continues to decline in some areas. Second, there is a clear legal obligation to take action in light of that information. Third, and most importantly, we can and should make policy choices that move us toward sustainable management by accounting for the needs of Steller sea lions and other Apex predators.

Much of the scientific information about the Western population of Steller sea lions is unequivocal. The population in Alaska has declined by more than 80 percent. That decline began as we shot the animals and coincided with the expansion of commercial fishing. It also continued until new fishery management measures were put in place in 2001. Those new measures appear to be helping to stem the decline in most areas, and the population overall appears to be holding steady or growing slightly.

There are, however, still significant declines in some areas, including a 45 percent decline in the Western Aleutians between 2000 and 2008. In addition, birth rates appear to be down across the population, which means that adult females are having fewer pups, and the population is aging.

Steller sea lions live in and depend on an ocean that supports some of the largest fisheries in the world. These fisheries target important prey for Steller sea lions, and we have reduced that prey, including Atka mackerel, Pacific cod, and pollock, by 50 to 70 percent. We also fished Aleutian Islands pollock, for example, to the point that it could no longer support a fishery.

Much of the ongoing debate has been about how much and whether these large fisheries are affecting Steller sea lions. In this regard, the law is absolutely clear. Fisheries cannot be authorized unless the National Marine Fisheries Service can ensure that they are not likely to cause jeopardy to Steller sea lions or adversely modify their critical habitat. This standard requires the Agency to give the benefit of the doubt to the species and requires that it allow for the species to recover.

It is true that other factors may be affecting sea lions. However, the fact that predation by killer whales or natural variability in the ocean, for example, might also be contributing to the decline or failure to recover in no way lessens the obligation to reduce impacts from fisheries.

Given the continuing decline in the Western Aleutian Islands and the population's overall failure to recover, the National Marine Fisheries Service had no choice but to take action. By reducing competition in the areas in which sea lion are still declining most rapidly, the Agency did the bare minimum needed. The new measures still allow for extensive commercial fishing while closing areas only where the population continues to decline and is at risk of being extirpated from portions of its range. These measures are not as restrictive as some scientists recommended and low birth rates may warrant.

Ultimately, the fact that this conversation is happening in the context of the Endangered Species Act should serve as a wake-up call to rethink the way we make decisions about fisheries. The most obvious place to start is by determining how to allow for the needs of top predators, like Steller sea lions, when fishing levels are set. We can do better than single species stock assessment

models, and should move toward addressing ecosystem needs as fishing levels are set.

The Council has begun this process with the Aleutian Islands Fishery Ecosystem Plan, and we should take the steps toward ecosystem base management called for in that document and others.

We can also find better ways to take fish from the ocean and to favor more sustainable gear, such as long lines, pots, and jigs.

Finally, rather than looking to find causes other than fishing for Steller sea lions' continued decline and failure to recover, we should dedicate funding to better understanding ocean ecosystems and the impacts of fisheries on them.

In the end, we all support healthy ocean ecosystems, including sustainable fisheries and vibrant communities. As we toward that goal, we should make choices based on clear scientific information, our basic obligations, and a policy that moves us toward sustainable management.

Thank you again, and I am happy to answer any questions.

[The prepared statement of Mr. LeVine follows:]

**Statement of Michael LeVine, Pacific Senior Counsel, Oceana**

Good morning, Mr. Chairman and Members of the Committee. Thank you for the invitation to participate in today's hearing. My name is Michael LeVine, and I am Pacific Senior Counsel for Oceana. Oceana is an international marine conservation organization dedicated to using science, law, and policy to protect the world's oceans. Our headquarters are in Washington, DC, and we have offices in five states as well as Belgium, Belize, Spain, Denmark, and Chile. Oceana has more than 500,000 members and supporters from all 50 states and from 150 countries around the globe. Our Pacific work is headquartered in Juneau, Alaska, and, together, our Pacific staff has more than 180 years of experience working and living in Alaska.

Oceana works toward healthy ocean ecosystems, sustainable fisheries, and vibrant communities. We have been active in issues surrounding the endangered Western Population of Steller sea lions since our inception because the health of that population and the management of the prey species on which it depends are an appropriate lens through which to evaluate progress toward those goals. Despite the contentious history and current controversy surrounding this issue, the facts are clear: the western stock of Steller sea lions has declined by more than 80% since the 1960s. Though management changes implemented in 2001 appear to have some beneficial effect, the population as a whole is not meeting established recovery criteria and, irrespective of its overall status, continues to decline sharply in the western Aleutian Islands.

While there may be other factors contributing to the ongoing decline and failure to recover, competition with fisheries for food is the only one we have the ability—and obligation—to mitigate directly. The best way to achieve this goal, while allowing for sustainable fisheries and supporting communities, is to move toward ecosystem-based management for our oceans. The North Pacific Fishery Management Council and National Marine Fisheries Service (NMFS) have made important strides in this direction, including preparing the Aleutian Islands Fishery Ecosystem Plan (AIFEP) and protecting important seafloor habitat from bottom trawling. The population of Steller sea lions, however, is telling us clearly that more can and should be done.

Ultimately, this conversation is about our oceans and the way we are managing large industrial fisheries. Accordingly, I will begin this testimony by discussing the importance and health of the North Pacific ocean ecosystems, with a particular focus on the Aleutian Islands, the Western Population of Steller sea lions, and the impacts of large-scale industrial fisheries. I will then outline the extensive process undertaken by NMFS, including the role played by the Council, and the justification and clear need for the management changes implemented by NMFS pursuant to the recent Biological Opinion (BiOp). Finally, I will discuss additional steps toward ecosystem-based management that should be implemented.

## **I. The North Pacific Can Support and Maintain Healthy Ocean Ecosystems, Sustainable Fisheries, and Vibrant Communities.**

### *A. Oceans are Central to Our Well-Being, and the Aleutian Islands Ecosystem, in Particular, is Unique and Important.*

Covering more than 70% of the world's surface, oceans and seas are our largest public domain, and good stewardship of our ocean resources is vital to our lives and livelihoods. As the U.S. Commission on Ocean Policy stated, "the importance of our oceans, coasts, and Great Lakes cannot be overstated; they are critical to the very existence and wellbeing of the nation and its people." An Ocean Blueprint for the 21st Century 1 (Sept. 20, 2004); *see also* Exec. Order No. 13547 (2010) ("America's stewardship of the ocean, our coasts, and the Great Lakes is intrinsically linked to environmental sustainability, human health and well-being, national prosperity, adaptation to climate and other environmental changes, social justice, international diplomacy, and national and homeland security."). Thus, we must be careful not to risk the long-term viability of our ocean resources by prioritizing short-term economic gains or making poorly informed decisions that could foreclose future opportunities to manage sustainably.

Nowhere are these statements and the management considerations they engender more important than Alaska and, in particular, the vast, productive expanses of the North Pacific Ocean. The North Pacific, including the Bering Sea, Aleutian Islands, and the Gulf of Alaska, contains some of the most productive waters on Earth and supports rich and diverse marine life.

The Aleutian Islands ecosystem is one of the most vibrant, dynamic, productive and rare ocean environments in the world. At more than 1,000 miles, the Aleutian Islands form the longest archipelago in the world. These islands are stretched along a narrow shelf, and the bathymetry changes dramatically, from greater than 7,000 meters deep in the depths of the Aleutian Trench to the nearshore shallows, in a distance of less than 150 km. This unique geological setting creates rich habitat that draws millions of seabirds and hundreds of thousands of marine mammals each year.

The Aleutian Islands support more than 450 species of fish and shellfish, 260 species of migratory birds, and 25 species of marine mammals. Whales—humpback, blue, minke, bowhead, and orca—as well as sea lions, seals, and other marine mammals frequent these waters. More than 38 million seabirds—including a wide variety of geese, gulls, petrels, puffins, murrelets, auklets, and terns—flock to the islands to nest. The ocean waters support salmon, halibut, rockfish, cod, and crab, among other fish and shellfish.

The Aleutian Islands also harbor incredible aggregations of cold water corals. The density and diversity of these Alaskan corals rival tropical coral reefs, and there are deep-sea coral gardens that are unique to the Aleutian Islands. This living seafloor forms habitat that provides nurseries, places to feed, shelter from currents and predators, and spawning areas for many marine species.

This bounty in the Aleutian Islands has been overexploited. After the overhunting of sea otters and commercial whaling, early commercial fisheries in the Aleutians were characterized by a boom-and-bust cycle. *See* North Pacific Fishery Management Council, Aleutian Islands Fishery Ecosystem Plan 9, 16–19 (December 2007) (hereinafter "AIFEP"). Currently, between 220 and 440 million pounds of groundfish, primarily Atka mackerel, Pacific cod, and Pacific ocean perch, are removed annually from the Aleutian Islands region. Much of this biomass is removed from important feeding habitat for marine mammals, including Steller sea lions.

### *B. The Decline and Continued Failure to Recover of the Western Population of Steller Sea Lions Tell an Important Story About the Health of North Pacific Ecosystems.*

Despite its incredible productivity, not all is well in the North Pacific. The past several decades have witnessed significant declines in some marine mammal, bird, and fish populations. The continued decline and failure to recover of the Western Population of Steller sea lions, in particular, are telling an important story about the conditions under which large-scale industrial fisheries are authorized.

The Steller sea lion's range extends around the North Pacific Ocean rim from northern Japan through the Aleutian Islands and Bering Sea, and south to California. Based on DNA analysis and other factors, the U.S. population is divided into a Western Population, consisting of animals in the Gulf of Alaska and the Bering Sea/Aleutian Islands, and an Eastern Population, which is primarily in Southeast Alaska and along the west coast of North America. Despite their expansive range, the Steller sea lions breed at only a handful of discrete locations. The Western Population now occupies only 48 breeding sites (or "rookeries"), 38 of which are in Alas-

ka. See National Marine Fisheries Service, Endangered Species Act—Section 7 Consultation Biological Opinion on the Authorization of Groundfish Fisheries under the Fishery Management Plans for the Bering Sea and Aleutian Islands Management Area and the Gulf of Alaska 80, 85–86 (Nov. 24, 2010) (hereinafter “2010 BiOp”). As the Western Population has declined, the centers of production for the population have contracted and condensed. Now, twelve of the rookeries produce more than 60% of the population’s pups.

The worldwide abundance of Steller sea lions was estimated to be approximately 240,000 to 300,000 animals from the 1950s through the late 1970s; the vast majority of which were part of what is now recognized as the Western Population. That population declined precipitously, and it reached a low point in 2000, when it was estimated at 42,500 individuals—a decline of more than 80%. *Id.* at 80, 332. Much of this significant decline likely was caused by a combination of commercial and subsistence harvests and intentional shooting of the animals. *Id.* at 343. Though this direct mortality was largely ended in the early 1980s, the Western Population continued to decline.

Prior to 2000, NMFS had implemented only very limited protections for the Western Population. To address the continuing decline and its obligations under the Endangered Species Act, NMFS put in place new management measures in 2001. These new measures appear to have beneficial effects, and, overall the Western Population grew by approximately 3% annually from 2000 to 2004. According to NMFS, this brief period from 2000 to 2004 is the “the only increasing period observed since direct information began to be collected in the 1970s.” *Id.* at 287.

Unfortunately, this growth appears to have been temporary. From 2004–2008, the population was stable or slightly declining. Thus, as a whole, it is estimated that the Western Population grew by approximately 1.4 percent annually from 2000–2008. This growth, however, is not statistically significant, which means that we cannot tell whether it is actually increasing, decreasing, or staying steady. Thus, the population can be most appropriately described, overall, as stable.

Moreover, the population continues to experience significant declines in some areas. The most severe decline was observed in the western Aleutian Islands, where the already greatly diminished adult population declined an additional 45% from 2000 to 2008. In the central Aleutian Islands during the same period, the adult population declined by 11%. *Id.* at 333.

In addition to the declines observed in the western and central Aleutian Islands, the population of Steller sea lions is showing another sign of stress—decreased natality. Data collected in the last decade indicate that adult females are having many fewer pups than they did historically. The current birth rate estimated to be about 30% lower than it was before the population began to decline in the 1970s. *Id.* at xxviii. Although natality is low in the western and central Aleutian Islands—the areas in which population declines are ongoing—it appears to be down across the rest of the population as well. A female pup born ten years ago would be of prime breeding age, and she should have produced 3 or 4 pups by now. The decrease in natality, however, means that it is likely she has produced only 2 or fewer pups.

It is very likely that the small increase in the Western Population was due to increased survivorship. Pups are more likely to survive into adulthood than they were before the protection measures were put in place. Without a concurrent increase in natality, however, the growth of the population cannot be sustained. If pup production is not greater than mortality, the population will not grow. Further, the population will age as higher survival of adults and juveniles outpaces the lower birth-rates. A population with this structure is less resilient to disturbance and cannot quickly recover from population fluctuations. Thus, the risk of extinction for the Western Population increases as it ages and birth rates stay low.

Significantly, in contrast to the Western Population, the once relatively small Eastern Population of Steller sea lions has doubled since the 1970s. The population has grown so substantially that NMFS currently is considering petitions to remove the population from the list of species protected by the Endangered Species Act. The Eastern and Western populations share similar characteristics and depend on some of the same prey species—including pollock and Pacific cod. The most apparent difference between these two distinct populations is that no high volume groundfish trawling occurs in Southeast Alaska.

### *C. Industrial Fishing in the North Pacific Has Significant Impacts on the Ocean Ecosystem.*

In addition to ecological riches, the North Pacific also supports some of the largest fisheries in the world. Though these fisheries began in the 1920s, they started to take their current form in the 1950s. Currently, the Bering Sea/Aleutian Islands and Gulf of Alaska support fisheries that remove more than four billion pounds of



groundfish each year. This exploitation has expanded 7,500 percent since 1950. *See Greenpeace v. NMFS*, 106 F. Supp. 2d 1066, 1070 (W.D. Wash. 2000). Of this catch, between 220 and 440 million pounds of fish are removed annually from the Aleutian Islands region.

The vast majority of the fish caught are groundfish, among them Atka mackerel, Pacific cod, and walleye pollock. These same species are important prey for top predators, including Steller sea lions. Approximately 90% of these groundfish are caught by large trawl vessels, most of which are owned by individuals and companies from outside Alaska. These trawl vessels can remove huge quantities of fish in a short time. One pass of a trawl can net 40 to 100 tons of fish.

Such intense fishing reduces fish populations significantly. Projections for 2011 show that important prey stocks have been reduced by between 50–70% from their historic, non-fished levels. Aleutian Island Atka mackerel is expected to be at 56% of historic biomass; Aleutian Island pollock at 30%; Gulf of Alaska pollock at 29%; Bering Sea pollock at 48%; Bering Sea/Aleutian Islands Pacific cod at 37%; and Gulf of Alaska Pacific cod at 48%. *See NMFS, North Pacific Groundfish Stock Assessment and Fishery Evaluation Reports for 2011, available at* <http://www.afsc.noaa.gov/REFM/stocks/assessments.htm>. These projections will be updated with information from this year's stock assessments in December.

Moreover, there have been significant local depletion of important prey species. These depletions began when sea otters were hunted to near extinction by fur traders, continued with several decades of unsustainable commercial whaling, and led, in the 1960s, to the rise of the first industrial fishery for Pacific Ocean perch, which were overharvested within 15 years. *See AIEP* at 9, 16–19. Around the same time, red king crabs were overexploited and have not yet recovered. In the late 1980s through the mid-1990s, the stock of pollock in the Aleutians was quickly depleted. *See Barbeaux, S. et al., "Assessment of the Pollock stock in the Aleutian Islands" 213 (Nov. 2009)*. Similarly, the stock of Atka mackerel in the Gulf of Alaska was overharvested in the late 1970s. *See Lowe, S. et al., "Assessment of Gulf of Alaska Atka Mackerel" 1166, Tbl 16.1 (Dec. 2009)*.

These fisheries are huge economic engines, and the companies that run them are very powerful. Indeed, the value of the pollock fishery alone is over \$1 billion dollars annually. Certainly, these fisheries provide economic benefit in Alaska, and Oceana supports commercial fisheries that are managed sustainably. Neither the economic benefit, nor the will of the companies receiving it, however, is a sufficient justification for allowing unsustainable fishing practices.

## **II. NMFS Has Undertaken a Detailed and Extensive Process, and its Actions are Clearly Justified.**

### *A. Fisheries are Managed By the Secretary of Commerce to Achieve the Greatest Benefit to the Nation.*

The Magnuson-Stevens Fishery Conservation and Management Act ("MSA"), 16 U.S.C. § 1801 *et seq.*, is the overarching statute governing fisheries management in United States waters. The first stated purpose of the statute is "to conserve and manage [] fishery resources," and it makes the Secretary of Commerce responsible for fulfilling that obligation. The Secretary implements Fishery Management Plans that provide the measures necessary for the conservation and management of fisheries. These conservation and management measures are "all of the rules, regulations, conditions, methods, and other measures"

- (A) which are required to rebuild, restore, or maintain, and which are useful in rebuilding, restoring, or maintaining, any fishery resource and the marine environment; and
- (B) which are designed to assure that—
  - (i) a supply of food and other products may be taken, and that recreational benefits may be obtained, on a continuing basis;
  - (ii) irreversible or long-term adverse effects on fishery resources and the marine environment are avoided; and
  - (iii) there will be a multiplicity of options available with respect to future uses of these resources.

*Id.* § 1802(5). These measures define the fishery in terms of amount of fish caught, the time of year when fishery may occur, the gear types authorized, and other strictures. They are intended to provide the "optimum yield" from a fishery, which is defined as "the amount of fish which. . . will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems." *Id.* § 1802(33). Thus, protection of the fish stocks and marine environment is a central consideration in making decisions to authorize commercial fishing.

In determining how best to meet these obligations and others under the statute, the Secretary of Commerce is advised by eight regional councils comprised of certain state and federal government representatives and other stakeholders that are nominated by the governors of affected states and are generally representatives of the commercial fishing industry. The North Pacific Fishery Management Council is the regional body that advises the Secretary about conservation and management of fisheries in Alaska.

The MSA, however, is not the only statute that affects fisheries. In making final decisions about fisheries management, the Secretary of Commerce must also ensure compliance with other substantive statutes—including the Endangered Species Act (“ESA”), 16 U.S.C. § 1531 *et seq.* The ESA is designed “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved,” and “to provide a program for the conservation of such. . . species.” *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978) (quoting 16 U.S.C. § 1531(b)). The statute reflects “a conscious decision by Congress to give endangered species priority over the ‘primary missions’ of federal agencies.” *Id.* at 184.

To effectuate this purpose, the ESA places on all federal agencies the substantive obligation to “insure that any action. . . is not likely to jeopardize the continued existence of any endangered species. . . or result in the destruction or adverse modification of habitat for such species.” 16 U.S.C. § 1536(a)(1). Agencies must engage in a consultation process with the appropriate expert wildlife agency on the impacts of any federal action to listed species. As it evaluates the BSAI and GOA groundfish fisheries, NMFS is both “action” and “expert” agency: “NMFS’s Office of Sustainable Fisheries is the ‘Action’ Agency” because it is responsible for authorizing the fisheries, “and NMFS’s Office of Protected Resources is the ‘Expert’ Agency” because it provides the opinion about whether those fisheries comply with the ESA. *See Greenpeace v. National Marine Fisheries Serv.*, 237 F. Supp. 2d 1181, 1185 n.2 (W.D. Wash 2002). These consultation processes are completed in NMFS’s regional offices and are signed by the Regional Administrator, who oversees the regional divisions of both Protected Resources and Sustainable Fisheries. The agency, therefore, must pay particular attention to its procedural obligations and must take all necessary precautions to protect the scientific process within the Office of Protected Resources, as expert agency, as it prepares a BiOp.

NMFS’s obligation to prevent jeopardy and adverse modification includes not just ensuring survival of the species but also allowing for recovery—an action can cause jeopardy or adverse modification when it does not allow for the recovery of the listed species. *See Gifford Pinchot Task Force v. U.S. Fish and Wildlife Serv.*, 378 F.3d 1059, 1069–70 (9th Cir. 2004). Recovery means an “improvement in the status of listed species to the point at which” the protections of the statute are no longer necessary.

Thus, in determining whether to authorize fisheries and under what conditions, the Secretary of Commerce and NMFS, as advised by the Councils, must strive to “provide the greatest overall benefit to the Nation” while “taking into account the protection of marine ecosystems” and ensuring that the actions do not cause jeopardy to species protected under the ESA or adversely modify critical habitat.

*B. NMFS Has Undertaken a Detailed and Extensive Process To Ensure That the Groundfish Fisheries Comply With the MSA and ESA.*

Difficulty in balancing the complementary legal obligations for management of the groundfish fisheries in Alaska and controversy about competition with Steller sea lions are not new phenomena. In fact, this hearing is another chapter in a conversation that goes back two decades. The population declines explained above led the Western Population to be listed under the ESA as a threatened species in 1990. Critical habitat was designated for the species in 1993, and in 1997, it was reclassified as endangered. At that time, NMFS had concluded that the groundfish fisheries were not likely to cause jeopardy to Steller sea lions or adversely modify their critical habitat. The rationale for that conclusion was the subject of lengthy and often contentious litigation beginning in 1998. *See Greenpeace*, 237 F. Supp. 2d at 1184. In the course of that litigation, the court repeatedly rejected the agency’s rationale and even enjoined all trawl fishing in designated critical habitat from July through August 2000.

NMFS issued a revised BiOp in 2000 which concludes that the groundfish fisheries, as managed under the Bering Sea/Aleutian Islands and Gulf of Alaska FMPs are likely to jeopardize endangered Steller sea lions and adversely modify their designated critical habitat by competing with Steller sea lions for prey. It, therefore, proposed a reasonable and prudent alternative (RPA), which was subsequently amended. That Amended RPA includes measures designed to reduce competition with Steller sea lions and was the subject of a 2001 BiOp. The 2001 BiOp was sup-

plemented in 2003 with additional analysis of the RPA. The 2003 Supplement was not subject to court challenge and, therefore, concluded that consultation process.

Those analyses all reached the same conclusion—the groundfish fisheries compete with Steller sea lions for prey and that competition may cause jeopardy to the species and adversely modify its critical habitat. Accordingly, management measures are needed to address that competition and ensure the viability and recovery of the population.

Further, NMFS worked to revise the recovery plan for the species and, in 2008, issued a revised Recovery Plan for the Steller Sea Lion. See <http://www.fakr.noaa.gov/protectedresources/stellers/recovery/sslrpfinalrev030408.pdf> (hereinafter “Recovery Plan”).

That plan establishes very clear demographic criteria for recovery of the Western Population of Steller sea lions. To be considered for delisting, the population must have “increased (statistically significant) for 30 years (at an average annual growth rate of 3%), based on counts of non-pups (i.e., juveniles and adults).” *Id.* at V-21. In addition, the population also must be stable or increasing “in at least 5 of the 7 sub-regions. The population trend in any two adjacent sub-regions can not be declining significantly[,] and the population trend in any sub-region can not have declined by more than 50%.” *Id.* At this time, those criteria represent the best available scientific understanding about the changes in the population that are necessary to ensure recovery.

This plan was subject to extensive review. A draft was reviewed by the public and peer reviewers in 2006, and it was subsequently revised and updated. The Draft Revised Recovery Plan was again reviewed by the public in 2007, underwent an independent scientific review by the Center for Independent Experts and a North Pacific Fishery Management Council Review (contracted to the North Pacific Research Board), and was then revised and updated again.

Throughout this time, significant time and money was dedicated to research about Steller sea lions and the causes of the continued decline and failure to recover. All told, more than \$100 million was spent on research into these questions. Much of this research, however, has been designed to look for causes other than commercial fishing for the ongoing decline and failure to recover. Relatively little funding was directed toward a better understanding of the effects on predators of removing large volumes of prey.

In 2006, perhaps in response to encouraging signs in the population trend, the Council encouraged the NMFS Office of Sustainable Fisheries to request a re-initiation of ESA consultation. The Office of Sustainable Fisheries did so, and the NMFS Office of Protected Resources agreed to start a new consultation process to revisit the conclusions in the 2000 BiOp, as amended in 2001 and 2003, about the effects of the groundfish fisheries on Steller sea lions. In 2008, the NMFS Office of Protected Resources agreed to delay the BiOp in order to allow for consideration new survey data.

In August 2010, NMFS released a draft BiOp. That draft concluded that the management measures put in place in 2001 were not sufficient to prevent jeopardy to Steller sea lions or to prevent adverse modification of their critical habitat. It, therefore, included an RPA further restricting fishing in the far western Aleutian Islands, where the significant population declines continued.

The release of a draft was unusual, as the ESA does not contemplate public comment on draft BiOps. Nonetheless, public comment was accepted on that by the agency until September 3, 2010. In addition, the Council held a special meeting in August 2010 to discuss that draft. NMFS also made a presentation regarding the BiOp process at the Council’s normal October meeting, and the agency stated that it would consider the Council’s input from that meeting.

The agency’s actions should not have come as a surprise. As explained above, there was clear population information showing the continued decline and failure to recover; these data were publicly available and were presented to the Council. Throughout this process, the Council could have recommended changes to the groundfish fisheries management in an effort to address the problems with the population. See 18 U.S.C. § 1853(c) (stating that a council may submit proposed regulations it “deems necessary or appropriate”). It, however, did not do so.

NMFS completed the consultation process in December 2010 with issuance of the final BiOp and interim final rule. See 75 Fed. Reg. 77535 (Dec. 13, 2010). The rule implements the proposed RPA with minor changes; it puts in place badly needed protections for the portion of the Western Population in the far western Aleutian Islands that is still declining significantly. NMFS accepted public comment on the interim final rule, and it will eventually be supplanted by a final rule.

Currently, NMFS is beginning a review of the BiOp by the Center for Independent Experts (CIE). That review is part of the agency’s normal process for scientific documents like this one. The CIE is equipped to undertake a true scientific

peer review, using reviewers who have the requisite scientific expertise and who are independent of the various stakeholders in the process. By contrast, the review panel organized by the States of Washington and Alaska cannot be considered an independent scientific review. Indeed, the State of Alaska has a clearly established position with regards to the current status and trend of the Steller sea lion and has made that position clear in its legal challenge to the BiOp and interim final rule. *See Alaska v. Lubchenko*, No. 3:10-cv-00271-TMB (D. Alaska, filed Dec. 14, 2010)

Oceana supports decisions based on sound science and encourages agencies to gather and review basic information at all stages of the decision-making process. We also support established processes, have participated in those processes to the extent we are permitted or able, and will continue to do so.

*C. The Conclusions in the BiOp are Justified and the Management Changes Clearly Are Necessary.*

As explained above, the Western Population of Steller sea lions is not recovering and, in fact, continues to decline significantly in the far western Aleutian Islands. The population is not growing at a statistically significant rate, and, whether stable or slightly increasing, is not close to the 3% annual growth needed to meet the delisting criteria established in the Recovery Plan. Moreover, since 2000, the population has declined by more than 45% in the far western Aleutian Islands. Based on this information, NMFS concluded appropriately that the management changes implemented in 2001 were not sufficient to prevent jeopardy to Steller sea lions or to prevent adverse modification of their critical habitat. As the law requires, NMFS addressed that problem by increasing protections in the western Aleutian Islands. The agency's conclusion and subsequent action clearly are justified, and challenges to the cause of the decline or necessity of the management changes implemented are not credible.

As it has in every analysis since 2000, NMFS based the 2010 BiOp and interim final rule on its well-documented rationale that commercial fisheries adversely affect sea lions by competing with them for food. *See* 2010 BiOp at 197–202. The large-scale industrial fisheries described above remove incredible quantities of fish that otherwise would be available to Steller sea lions as prey. Much of this fishing effort occurs in important areas for Steller sea lions, and a significant amount of prey is removed from their designated critical habitat. It is difficult to imagine that reducing the availability of prey by 60 or 70 percent would not affect the population's ability to grow.

Moreover, there is evidence that such interactions are occurring. For example, sea lion populations have fared better in some regions than others, and the areas of improvement coincide with areas where conservation measures have been implemented. Conversely, the areas of sharpest Steller sea lion declines coincide with areas where sea lion protection measures are the fewest and fishing intensity within critical habitat is the greatest. *See* 2010 BiOp at 389, 392. The most likely mechanism for this correlation is nutritional stress resulting from the competition and leading to low birth rates, or “natality.” As explained above, natality is down across the population. Further, pup counts in the central Gulf of Alaska have not increased significantly since 1998. *Id.* at Tbl 3.2. Rookery counts in the central Gulf are possibly stable or declining, and pup counts are declining rapidly in several major rookeries. *Id.* at Fig. 3.10. These declines correspond with substantial fisheries in critical habitat for important prey species.

It may very well be true that other factors, such as changing ocean conditions, contribute to the ongoing decline and failure to recover. The existence of those factors, whether or not they are contributing to the decline or failure to recover, does not in any way affect our obligation to manage the one—commercial fishing—that we can control. The law requires it; in the face of scientific uncertainty, the ESA requires federal agencies “to provide the benefit of the doubt to the species concerned with respect to such gaps in the information base.” NMFS and US Fish and Wildlife Service, “Consultation Handbook” 1–7 (March 1998) (citing H.R. Conf. Rep. No. 697, 96th Cong., 2nd Sess. 12 (1979)). Scientific information supports it; other stresses on the population may result in cumulative impacts that make it even more important to ensure sufficient prey for sea lions. And, such action is good policy; protection for top predators is one important step toward better management and a healthy ecosystem.

Once NMFS found that the groundfish fisheries, as currently managed did not adequately protect the Western Population of Steller sea lions, the agency was required to take action to address that failing. In light of the clear, continuing, and significant decline of the Steller sea lion population in the western Aleutian Islands and the evidence that nutritional stress may be contributing to it, the additional closures in the far western Aleutian Islands clearly are warranted.

The new measures are not draconian. They are targeted only to that portion of the Steller lions' range in which the most significant declines are occurring and still allow for extensive commercial fishing. There are new closures only in the western-most portion of the Aleutian Islands, and the total allowable catch is reduced only for the Atka mackerel fishery. Even that reduction will not close the fishery; the allowable Atka mackerel catch will be reduced in 2011 by only 23% from 2010 levels. Moreover, the Pacific cod quota will not be reduced, and the pollock fishery is not affected by the new measures at all. Further, an earlier version of the BiOp required significant reductions in pollock catch around Kodiak to address low natality there. Ultimately, those protections were not implemented.

Contrary to the assertions that the management changes are unnecessary, it is clear that more should be done to address the ongoing failure to recover of the Western Population and to move toward ecosystem-based management.

### **III. Additional Protections are Likely Warranted, and Additional Steps are Needed to Move Toward Ecosystem-Based Management.**

While the management changes in the far western Aleutian Islands clearly are necessary, they are likely not sufficient. For example, and as explained above, we have not addressed low natality in all regions. There are several steps that could be taken to further move toward ecosystem-based management.

The most obvious place to start is by determining how to allow for the needs of top predators, like Steller sea lions, when fishing levels are set. Currently, the stock-assessment models on which catch levels are based simply assume a level of mortality for the fish species (for Atka mackerel, for example, it is 30%) and then assume that all consumers—other than the fisheries—can survive on that percent of the population. As evidenced by the ongoing decline of the Steller sea lion population, these assumptions are not sufficient.

Thus, we should implement the suggestion in the AIFEP to address predator-prey interactions and work toward an integrated management approach in which ecosystem considerations and the needs of predators, such as Steller sea lions are considered as fishing levels are set. An earlier version of the BiOp sought to implement such a process as part of the new management regime. *See* Endangered Species Act—Section 7 Consultation Draft Biological Opinion Final PRD Version 375 (May 3, 2010) (requiring, as part of the RPA, a revision to “the Harvest Management Strategy (e.g., optimum yield, harvest control rules, tier system) for exploited groundfish forage species (pollock, Atka mackerel, and Pacific cod) that explicitly incorporates the needs of non-exploited apex predators (e.g., marine birds, marine mammals), and in particular, the needs of ESA listed species to meet their recovery goals”). In addition to more effective management under the MSA, such a process would help meet the ESA’s policy of protecting ecosystems and would be an important step toward implementing the AIFEP.

Further, we must move toward viable sustainable fisheries, that could include fixed gear fisheries such as longline, pots, and jigs, that can support local communities. Where tradeoffs are possible, NMFS should favor these more sustainable alternatives. The agency cannot simply weaken necessary protections to allow additional fishing for Steller sea lion prey, but it can consider strengthening other protections to allow these fisheries to continue and to continue to develop in a sustainable manner. For example, NMFS could strengthen protections by addressing overall harvest levels, further reducing the biomass taken from the western Aleutian Islands by the cod and Atka mackerel trawl fisheries.

It is important to note that current allocation of Atka mackerel catches in the Aleutians do not allow for any of that catch to be delivered and processed in Alaskan communities. Almost no Atka mackerel quota is caught by Alaskan residents. Through Amendment 80 to the Bering Sea/Aleutian Islands Fishery Management Plan, almost all of the Atka mackerel quota has been allocated to a handful of factory trawl vessels which catch and process Atka mackerel offshore. The Atka mackerel quota does not provide processing opportunities for the fish processing plant in Adak or elsewhere in the Aleutians.

In addition, the overfishing of Aleutian Islands pollock described above ended a substantial portion of the large-scale commercial fishing opportunities in the Aleutian Islands. In addition to sea lions, the fish processing plant in Adak, which was built to rely on a congressional allocation of fish from an Aleutian pollock stock that can no longer support sustainable fisheries, is another victim of this unsustainable management. While it may be unfortunate that the remaining large-scale fisheries that target Steller sea lion prey must bear the brunt of recovery efforts, that process is not the appropriate mechanism through which to address the Adak processing plant. Oceana supports efforts to maintain communities like Adak and to provide

sustainable Alaskan fisheries. Together, we can find a way to do that without sacrificing our ocean resources.

Finally, as we move toward ecosystem-based management, all Alaskans should insist on the best available science and process. We cannot let political considerations—at the federal, state, or local level—get in the way of decisions about our oceans, and we must let the experts fulfil their obligations under the MSA and ESA.

#### IV. Conclusion

With an extensive coastline and many cultural, recreational, subsistence, and commercial benefits inextricably linked to our oceans, all Alaskans should support healthy ocean ecosystems, sustainable fisheries, and vibrant communities. The Western Population of Steller sea lions provides a lens through which we can evaluate our progress toward those goals. The science is clear—the Western Population of Steller sea lions is not recovering and continues to decline in some areas. The law is clear—we cannot authorize fisheries that may cause jeopardy to a listed species or adversely modify critical habitat. And, the policy is clear—Steller sea lions are telling us that if we want to manage oceans sustainably, we must change the way we manage fisheries to account for the prey needs of apex predators.

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Mr. HASTINGS. Thank you, Mr. LeVine, and thank all of you for your testimony.

Mr. LeVine, this hearing today is on Steller sea lions, and yet—I will not say and yet. But I note in your written testimony, you say there are between 220 and 440 million pounds of groundfish that have been removed annually from the Aleutian Islands region.

I do not know what you are saying exactly there, but are you suggesting that the North Pacific Fishery Management Council has not been doing an adequate job in managing those fisheries?

Mr. LEVINE. Thank you, Chairman Hastings. No, that statement in written testimony is no way intended to denigrate the work of the North Pacific Fishery Management Council. Oceana supports the work of the Council. We have been involved there.

To begin with, that statement and the ones referencing the 4 billion pounds of fish that are removed from the North Pacific ecosystem every year is intended to show what the real issue here is. We are here talking about fishing, and the decisions we are making to authorize large-scale commercial fisheries in the ocean, and what impacts those fisheries might have.

It is unfortunate that we have to have that conversation in the context of the Endangered Species Act—

Mr. HASTINGS. In what context did you say it in? I mean, I am hearing you saying yes, and I am hearing you saying no. I am just asking for a clarification.

Mr. LEVINE. Yeah. We have pushed against the backstop of the Endangered Species Act. And with a better understanding of what is in the ocean and a movement toward ecosystems—

Mr. HASTINGS. I asked you about the other side of the equation, and I did hear you talk about the Endangered Species Act.

Your last statement in your oral testimony was something like we need to have clear scientific review or something to that extent. I can go back and look exactly. And I assume you believe that.

Do you believe that a ratio in part of studying 13 pups in a population of 55,000 is adequate?

Mr. LEVINE. Thank you, Mr. Chairman. Oceana would support additional studies and research, both—

Mr. HASTINGS. Well, I asked you if you thought that was adequate.

Mr. LEVINE. I run the risk of running afoul of Representative Young by stating that it is the best science, and that is the best science that we have. And the Agency is charged—

Mr. HASTINGS. So, the best science is 13 out of 55,000.

Mr. LEVINE. That is the science we have right now.

Mr. HASTINGS. Or is that the science that was chosen?

Mr. LEVINE. My understanding is that is the science that we have.

Mr. HASTINGS. I just find that hard to believe because I think the testimony that has been referenced—well. Let me go back to Mr. Loomis. Maybe you can shed some light because you know that your company participated in the research. Can you describe that research? Did it touch on this at all?

Mr. LOOMIS. Thank you, Mr. Chair. We were not part of the research that tagged the sea lions, the juvenile males. But my understanding is that I believe there were 13 males that were tagged, and I think three of those males wandered around outside of critical habitat. And juvenile males are the part of the population that we are least concerned about. We are concerned about adult females and what is happening to pups.

Mr. HASTINGS. Well, let me ask you this then. Do you think a ratio of 13 or 10, if three of them—do you think that is adequate to base decisions that are made?

Mr. LOOMIS. Mr. Chairman, I think what is adequate is to take the science that you have and see if it passed the red face test. And I think if you look at using information from three juvenile males, which are known to wander.

Mr. HASTINGS. Are you suggesting that does not pass the red face test?

Mr. LOOMIS. I am suggesting exactly that.

Mr. HASTINGS. I thought that was where you were going. I just wanted to get a clarification.

Mr. Tsukada, one last point. You referenced the fuel costs. Do you believe that the BiOp adequately took into account all of the economic impacts?

Mr. TSUKADA. I do not.

Mr. HASTINGS. Would you like to elaborate?

Mr. TSUKADA. As Professor Knapp mentioned, a lot of the economic analysis, the standard ones, were done fairly well, fairly broad scope. But I did not receive a phone call. Nobody at the Aleut Corporation received a phone call. Very little was done on the impact. I do not see anywhere where our lost fuel sales, which translates into salaries for the residents, were included. So, no, I believe that the economic analysis, as large as it is, is severely understated, and has a higher proportion of direct impacts to the low income folks on the Aleutian Islands.

Mr. HASTINGS. Thank you very much.

Mr. Young?

Mr. YOUNG. Thank you, Mr. Chairman. Mr. Loomis, you note that in 2008, your fleet developed a harvesting cooperative, which changed the way you fished in the Bering Sea. Was this change analyzed in the Biological Opinion? And if not, do you think it would have made a difference in fishing restriction?

Mr. LOOMIS.—through the Chair, I do not recall specifically. I do not believe it was analyzed in the BiOp, and with those changes, we carry two observers on all of our vessels that fish in the Aleutians. We have every hull sampled by observers. They monitor for marine mammal interaction. So, we have cameras that run 24/7 on most of our boats while we are processing fish, so we are probably the most observed fleet out there. But I do not believe—

Mr. YOUNG. Did NOAA use any of that information? You do not know.

Mr. LOOMIS. I do not.

Mr. YOUNG. We should have asked that question. We will find out again. We will ask it in writing.

NOAA has complained that it is hard to observe the Western Aleutian Islands, and I happen to agree. I have been out there. I have been all the way out to Kiska and Adak, by the way, Mr. Tsukada, and had a great time. Great potential out there. But you are being robbed right now by a Federal agency. You are absolutely correct.

If I had any suggestions, probably do not follow them; it will get you in trouble. Go catch the fish. Let the darn Navy come out and try to take you down, or NMFS, because that is right, what you said the history of the Aleuts has been one of a tragedy. And you established a situation out there and gave them hope and a chance, and they are eliminating that. They do not care. They live in Silver Spring or someplace like that, you know. They got their heating oil at probably \$3 a gallon, I will say that. But they took that away from you.

Let me see what else I have here. Again, I will ask the same thing of Mr. Little. Did they use your fleet? Did they ask to use your fleet, both of you, Mr. Loomis, that they can do any research at all?

I have not found out what research they have done. They never answered that question. I want you to comment on it.

Mr. LOOMIS. Through the Chair, as far as the research goes, our company has been actively working with a number of institutions to try and fill in the gaps. We have gone as far as training crew to collect samples. We have spent hundreds of thousands of dollars of our own money through a private foundation to do research to try and fill in some of these gaps. And the issue, Dr. Trites alluded to one of the issues, funding. I would like to see Oceana and their members instead of putting money into lawsuits, I would like to see them fund some active research.

Mr. YOUNG. Hallelujah. Go ahead.

Mr. LOOMIS. I would also like to see some relief in the permitting process. We cannot get permits to work in the Western Aleutians to go study the fishery interactions.

Mr. YOUNG. Now, who gives the permits, NOAA and NMFS?

Mr. LOOMIS. They come out of the permitting office in Silver Spring, I believe.

Mr. YOUNG. Silver Spring. So, it means if you wanted to go out and observe pups and actions of the sea lions, you have to get a permit?

Mr. LOOMIS. That is correct.

Mr. YOUNG. Do they go out there?



Mr. LOOMIS. The particular research I am referencing was to be conducted by the National Marine Fisheries Service. We had funding in place through the North Pacific Research Board. We had a match from—

Mr. YOUNG. Speed it up. I mean, did they go out there?

Mr. LOOMIS. They did not because they could not get the permit to do it.

Mr. YOUNG. You mean, from their own operation, or you could not get it?

Mr. LOOMIS. They could not get it. National Marine Fisheries Service would not issue themselves a permit to do the work.

Mr. YOUNG. Oh, boy. Does that sound like our great government? I am going to ask that question, too. I mean, the idea they could not issue a permit to themselves, yet they will come down and stop a fisheries, and they are going to make decisions?

You guys got to support my new bill, Mr. Chairman. I am going to eliminate all regulations from every Agency from '91 to 2011 until they can justify it. To me, that makes sense. There is no justification for this. This is driven inside.

Dr. LeVine, you do believe in science, do you not?

Mr. LEVINE. Yes, I do.

Mr. YOUNG. You do? But you file lawsuits against scientific findings many times in your organization. Supposing they clean the seas up. Now, where are you cleaning the seas up? What does the sea lion got to do with it?

Mr. LEVINE. Representative Young, in this situation with regard to the sea lions, the litigation has been brought by the State of Alaska and the fishing industry. Oceana has gotten involved to defend what we believe were scientifically necessary—

Mr. YOUNG. On what grounds? In fact, every testimony I have had here, science is flawed. Everybody's testimony, other NMFS themselves, who did not issue themselves a permit to go out and do the studying.

The fact is, Mr. Chairman, I think that is probably a sign of total incompetency. You could not issue yourself a permit? I can get a permit to go to the bathroom in a heartbeat, and they could not issue themselves a permit? I mean, where is the science behind that?

Mr. LEVINE. Representative Young, I am not in the position to comment on the Agency's internal process about permits or otherwise.

Mr. YOUNG. But you joined the lawsuit against the State and against the State of Washington, correct?

Mr. LEVINE. In this situation, Representative Young, the Steller sea lions in the far Western Aleutians continue to decline, and Oceana is involved in litigation and other efforts in order to further—

Mr. YOUNG. What basis? There is no science to back that up. It does not decline. In fact, we got reports that the pup population is increasing. In fact, after the year 2000, yes, from 60 then, they may have declined, but they are actually increasing. The species is healthy and the biomass is strong to feed the—so what does Oceana. You are going get me like Sierra Club pretty quick, buddy, because you do it to gain on the side without looking at the science.

So, what is the science you joined that lawsuit?

Mr. LEVINE. Representative Young, overall, the population is either holding steady or growing slightly.

Mr. YOUNG. Holding steady and growing slightly, yet you are part of that lawsuit to back up the non-scientific NMFS/NOAA findings.

Mr. LEVINE. In the Western Aleutian Islands, the population has declined by 45 percent between 2000 and 2011.

Mr. YOUNG. And it increased where?

Mr. LEVINE. I am sorry, I did not understand—

Mr. YOUNG. Where did it increase?

Mr. LEVINE. It increased to the east of that population.

Mr. YOUNG. And is that DNA of those sea lions exactly the same thing?

Mr. LEVINE. The Agency has treated that population as one stock, yes.

Mr. YOUNG. As one stock. But is the DNA the same?

Mr. LEVINE. My understanding is that it is.

Mr. YOUNG. That is right. So, they just went where they thought they could do—maybe they wanted to visit their aunt and uncles. You ever think about that? When you filed that lawsuit, the people in Adak and the Aleuts, did you take them into consideration?

Mr. LEVINE. Yes, we did, Representative Young.

Mr. YOUNG. You did? And you contribute to them? You helped them make up that fuel price? I know I am running out of time.

Mr. LEVINE. It is unfortunate that the large scale fisheries have to bear the brunt of the situation that we found ourselves in. And we support long-term sustainable fisheries that will help provide for communities. And that is our job as an ocean conservation organization.

Mr. HASTINGS. Will the gentleman yield?

Mr. YOUNG. Yes, gladly. I know you got to go.

Mr. HASTINGS. That graph over there shows the Aleutian Islands from West to East. And you can see the green line there shows an increase, and there are a few places there admittedly going down. But on the whole, it is an increase. I just think that is—one can pick out any individual part and base a whole lot of conclusions, I guess, like sampling 13 out of 55 and come up with a conclusion. But that graph there, which is NOAA's data, by the way, I think is somewhat significant. So, I will yield back to the gentleman.

Mr. YOUNG. It goes back to I get very frustrated, and then everybody else should be frustrated. There is no science to back up what was done by NOAA/NMFS. And, Mr. LeVine, my problem is you are supposed to be a reputable group of people, but you are falling into that trap of not following science. Again, Mr. Chairman, available science. We should have best science.

What NMFS did is not the best science. What NMFS is an agenda, and you should not be part of an agenda unless you really believe the fact that people do not count. There are groups of people in the United States that believe people are the evil thing. Everything is bad we create. Everything we create. That is nonsense. You ought to think about that.

You are a legal man. There is no law that says that they could not have taken and considered this and the other options. That is

in the law. I want a few people to know a little bit about the law. I did not read everything, but I know a little bit about it. And what you have to think as an organization is maybe we ought to analyze this a little more and not back up an agency that has gone rogue. That is what they have done. It is not the first time. But they have collectively got worse as time goes by.

And, Mr. Chairman, again, I will tell you our Congress with its oversight ability ought to look at the funding pots of these agencies. And maybe understand that maybe there is another side of this coin. And I will tell you right now, there is a big side.

So, Mr. Chairman, I am tired of raving, but I can do more of it. But go ahead.

Mr. HASTINGS. Well, listen, the gentleman is—many of his constituents are directly impacted by this, so I can understand his passion. And frankly I think it is very well placed. And the mere fact that we are out here having a hearing in areas that are impacted shows the seriousness that this Committee and this Chairman takes with this issue. But I want to thank you very much for coming down.

And I want to thank this panel for your testimony. There may be some follow-up questions to you. Certainly there is going to be a follow-up question to other panels that came from this panel, and I appreciate very much your making that suggestion. But if there are follow-up questions to you, I would hope that you would respond in a timely manner.

And with that, I will dismiss the panel. And, again, I want to thank everybody, all three panels, members of the panel, for being here, and those that came.

And with that, no further business before the Committee, the Committee stands adjourned.

[Whereupon, at 11:44 a.m., the Committee was adjourned.]

